The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 675.—Vol. XVIII. LONDON, SATURDAY, JULY 29, 1848. [Price 6d.

MINE MATERIALS FOR SALE, BY AUCTION, AT WHEAL TREVENNA.

MR. GEORGE CARNE respectfully announces, he is instructed to SELL, without reserve, on Tuesday, the 8th August next, at WHEAL TREVENNA MINE, in the parish of ST. NEOT, CORNWALL, valuable

MINE MATERIALS—COMPRISING

An excellent WATER-WHEEL, 30 feet diameter by 3 feet breast, with oak rings, cast-iron axle, brasses, &c., complete.

100 Fathoms of 1¼-inch iron rods
11 7-inch pumps
3 6-inch ditto
1 6-inch plunger-pole, with stuffing-box and gland, H-piece, door-piece, windbore, and case to fit
1 5-inch working barrel
1 5-inch windbore
1 5-inch door-piece
35 Fms. of 5-inch wood-rods, with strapping plates and bolts, complete
2 Balance-bobs
1 Horse-whim, with shaft, tackle, &c. complete
2 Horse-whim kibbles
70 Fathoms of best-proved ¾-inch chain, nearly new
50 Fathoms of ladders

A quantity of timber, iron, and other articles of various descriptions, connected with mining operations.

The above materials are nearly new, and of excellent quality; they may be inspected prior to the sale, by application to the agent on the mine; and any further particulars can be obtained of Mr. Thomas Milton, the purser, Liskeard; or at the auctioneer's offices, George-street, Plymouth.

Sale to commence at Twelve precisely.

The Auction Mart, 20, George-street, Plymouth, July 19, 1848.

HERODSCOOMBE MINE.—FOR SALE, BY PRIVATE CONTRACT, HERODSCOOMBE MINE MATERIALS, either together or in separate lots, consisting of—

3 9-feet 7-inch pumps
1 9-feet 6-inch working barrel
1 6-feet 6-inch doorpiece
1 9-feet 6-inch windbore
1 Horse-whim
2 4-feet whim-shieves
2 Horse kibbles
1 Balance-bob
1 Shaft-bob
2 Traveller-bobs
Horizontal wood sweep-rod
30 Fathoms 9-inch square iron-rods
2 Winze kibbles
1 Large stool—and

A 16-inch cylinder DIRECT DOUBLE-ACTING ROTARY STEAM-ENGINE and BOILER, complete, with pumping and drawing apparatus attached.

This engine is in excellent condition—was erected new, about 18 months since, and the rotary and pumping apparatus about nine months, from the drawings, and under the superintendence of Messrs. Hocking and Loam, engineers; and, for cheapness of construction, efficiency, and economy, has given the most entire satisfaction.

Parties in want of an engine to sink 40 or 50 fathoms for trial, will find this one well adapted for that purpose; and should the trial prove satisfactory, and a larger pumping-engine be required, this can be applied wholly to drawing and crushing, with no expense, as her construction will admit of her being first placed in a proper position, at a distance from the shaft.

All particulars may be had of Mr. Matthew Loam, engineer, Liskeard, to whom all tenders, stating the highest prices, must be addressed.

FLINTSHIRE.—TO BE SOLD, BY PRIVATE TREATY, all those FREEHOLD LEAD and ALKALI WORKS, situate at FLINT, in the county of Flint.

The LEAD-WORKS contain smelting-furnaces, slag-hearths, refineries, crushing-mills, red lead ovens, with grinding apparatus for eight ovens, &c., and one of the finest rolling-mills in the kingdom, nearly new, with width of rolls of 9 ft. 2 in.; three steam-engines stand on the premises, which have also the advantage of water-power, by means of a reservoir, supplied by a large stream of water, working two wheels.

The ALKALI-WORKS consist of lead chambers, furnaces, vats and pans, &c., complete, and are adapted for the manufacture of 30 tons of soda ash per week.

The whole premises, which are freehold of inheritance, embrace about 8 acres of land, and stand on one of the deepest points of the River Dee, where vessels of large size can lie in safety; and, by means of a wharf and crane, can be laden and unladen with the greatest facility.

Coal is brought to the doors of the furnaces, by a railway from adjacent collieries.

A good turnpike-road, and the Chester and Holyhead Railway, run through the property—the latter having a station at a distance of about 200 yards; and, altogether, the situation of the premises cannot be surpassed, and stands unequalled for the beneficial carrying on of a great and extensive business.

The recent expiration of Mr. Pattinson's patent, for the desilverising of lead, affords great advantage, and makes the present a valuable opportunity for the profitable investment of capital.

The foregoing premises formed the well-known and long-established works of the late firm of George Roskell & Co.; late deaths of proprietors have rendered it necessary to have the same disposed of.

For all further particulars, and to treat, apply to George Potts Roskell, Esq., Stockyn, Holywell, Flintshire; Mr. Williamson, solicitor, Holywell; or to Mr. Wm. Williamson, solicitor, Holywell.

A good house on the premises, with spacious offices and stable.

Holywell, July 22, 1848.

TO BE SOLD, OR LET, a valuable COAL MINE, in the township of GREAT HARWOOD, in the county of Lancaster. The mine has been recently proved, and found to be 3 feet 2 inches in thickness, and of excellent quality; it is commonly called, or known, by the name of the UPPER MOUNTAIN MINE, and extends over about 1000 statute acres, which will be divided into suitable lots.

The property is situated between the towns of Blackburn and Clitheroe, and is intersected by a branch of the East Lancashire Railway.

A section of the borings may be seen, by applying to Mr. Boosie, Rufford-hall, Ormskirk; or to Mr. Whittle, coal viewer, Charnock Richard, Chorley—to either of whom proposals may be sent.

TO ENGINEERS, IRONFOUNDERS, AND OTHERS.—FOR SALE, BY ASSIGNEES OF BANKRUPTS, EXTENSIVE PREMISES—suitable to the above trades—situated in a mining and manufacturing district, in the proposed line of the South Wales Railway, and contiguous to, and having connection with, floating docks, in a thriving seaport, within the South Wales Coal Basin.

This is a rare and valuable opportunity for persons about to enter into, or desirous of commencing, either of these or any other businesses requiring extensive premises, combined with the above important advantages. Considerable sums of money have been recently expended on the premises, which have, until lately, been occupied for the manufacture of locomotive and other engines. The purchaser will have the option of taking the tools and machinery at a valuation.—None but principals, or their solicitors, will be treated with.

For particulars, apply to Thomas Rennie Hutton, Esq., official assignee, Bristol; or to Messrs. J. and J. H. Linklater, solicitors, 115, Leadenhall-street, London.

TRENANCE MINES COMPANY.—At the Second Annual General Meeting of shareholders in this company, held at the offices, No. 12, Cornhill, London, on Friday, the 28th day of July, 1848,

GEORGE BURNAND, Esq., in the chair,

The notice convening the meeting was read, as also the report of the directors—see another column of this day's *Mining Journal*.

The accounts having been submitted—it was

Proposed by B. E. Lindo, Esq., seconded by Francis Burnand, Esq.,

That the report and accounts, now read, be received, adopted, and entered into the cost and transfer book.—Carried unanimously.

Proposed by F. Berger, Esq., seconded by J. H. Pidcock, Esq.,

That G. Burnand, Esq., be re-elected a director of this company.—Carried unanimously.

Proposed by George Burnand, Esq., seconded by John Macmeikan, Esq.,

That B. E. Lindo, Esq., be re-elected an auditor of this company; and that James Edmund Smith, Esq., be elected an auditor, in the stead of William F. Street, Esq.—Carried unanimously. GEORGE BURNAND, Chairman.

Proposed by J. Macmeikan, Esq., seconded by Francis Burnand, Esq.,

That the cordial thanks of the meeting be given to the chairman and directors, for their zealous attention to the business of the company.

CORNWALL NEW MINING COMPANY.

Capital £100,000, divided into 20,000 shares, of £5 each.

Incorporated in pursuance of the Statute of 7 and 8 Victoria, cap. 110.

Bankers—London and County Bank, 21, Lombard-street.

The CORNWALL NEW MINING COMPANY is ESTABLISHED to WORK a series of TIN and COPPER MINES, chiefly in the district of ST. IVES, which has hitherto afforded a larger profit on its return of ore than any other part of the county.

In pursuance of this plan, five have been already selected—viz.: Georgia Tin Mines, Trewortha Tin and Copper Mine, Bray Tin and Copper Mine, Trevarno Tin and Copper Mine, and Wheal Squire Tin and Copper Mine—with whose owners the directors have succeeded in making such advantageous arrangements, as to enable them to work one or more with even a small portion of the proposed capital.

The directors beg to announce, that they are NOW ALLOTING the SHARES in the above company; and, from the number already disposed of, they request parties desiring to take shares to make early application. Those to whom allotments have been made, are requested to pay their deposits into the bankers of the company, as above.

The Deed of Settlement having been executed by the required number of shareholders to incorporate the company, parties who now take shares will not be required to sign it, or enter into any personal liability for calls or otherwise, although reserving their full rights as shareholders.—Office, 17, Essex-street, Strand. GEO. LOCKWOOD, Secretary.

VENTILATION OF COAL MINES—BIRAM'S PATENT ANEMOMETER.—This INSTRUMENT has now been SUCCESSFULLY EMPLOYED by many eminent engineers, to whom reference can be given.

For particulars, apply either to the inventor, B. Biram, Esq., Wentworth, near Rotherham; or to the maker, John Davis, Derby, manufacturer of miners' dials, clinometers, safety-lamps, and all kinds of instruments appertaining to the engineer, are made and kept in stock.—Repairs promptly attended to. J. DAVIS, Irongate, Derby.

ROYAL COLLEGE OF CHYMISTRY, *HANOVER-SQUARE AND OXFORD-STREET.*

The progress of the educational department of the college, during the last two sessions, justifies the council in the belief, that, in a very few years, it will become self-supporting. In the meanwhile, from the great benefit the spread of chymistry is destined to confer upon the industry and prosperity of the country, the council earnestly call upon all that are interested in the agricultural, arts, and manufactures of Great Britain, to aid, by their contributions, the firm establishment of this national institution.

It is much desired to erect a new lecture room, upon the foundations already completed, whereby the operations of the school may be confined to the premises in Oxford-street—a plan which, if carried out, will greatly contract the annual expenditure of the college. The building fund is, therefore, kept open, to which the council solicit the contributions of all lovers of chymical science.

The NEXT SESSION will COMMENCE on MONDAY, the 2d of OCTOBER next, under the direction of Dr. A. W. Hofmann and assistants.

The Fee for Students working every day during the Session will be £15.

By order of the council, WILLIAM JOHNSON, Secretary.

VALUABLE INVESTMENT.—PARTNERSHIP or LICENSES FOR DISTRICTS OR ENTIRE COUNTIES.

Under British and Foreign Letters Patent.

HUTCHISON & CO.'S INDURATED AND IMPERVIOUS STONE, CHALK, SAND, PLASTER OF PARIS WORKS, CARTON ROOF SHEETING, AND WOOD, &c.

The produce supersedes all other building and decorative materials, for richness of effect, cheapness, and perfect durability.—Specimens to be seen at the chief offices, East Temple Chambers, 2, Whitefriars-street, Fleet-street, London; also at the Indurated Sandstone Works, Tonbridge Wells, Kent; or *à la Maladrérie*, near Caen, France.

All particulars afforded at H. and Co.'s offices; or of Mr. William Hutchison, Castle Hotel, Tonbridge Wells, Kent.

EMIGRATION AND COLONIZATION.—IMMIGRATION being much required in AUSTRALIA, NEW ZEALAND, &c., and as the supposed expense of an OUTFIT often prevents individuals emigrating, S. W. SILVER & CO., CLOTHIERS, OUTFITTERS, and CONTRACTORS (having a large interest to maintain in those colonies), have been advised to make known that they can supply a comfortable OUTFIT, including bedding, for MALE or FEMALE emigrants from £4 (*net*) upwards, or less (£2, if needful)—and for children in proportion—at

No. 4, BISHOPSGATE-STREET WITHIN—(*Opposite the London Tavern*),

Where Lists will be given on application.

S. W. S. & Co., being the makers of nearly every article in *all* the outfits they supply, and as one of their objects is to promote emigration, they neither receive from agents, nor pay the too usual commission to any person introducing passengers to be fitted out, so that the passage and outfit may be procured at the *least* possible expense; but they will, on application, advise passengers how to obtain the *most economic passage to the colonies*. They have a *representative* in every Australian colony, to whom they ship clothing monthly; thus they would forward small parcels free of expense.

NAVAL and MILITARY OFFICERS, MIDSHIPMEN, CADETS, CIVILIANS, LADIES, &c., are outfitted as heretofore, at the CABIN-PASSENGER OUTFITTING WAREHOUSE, Nos. 66 and 67, CORNHILL (the emigration outfitting being exclusively at 4, BISHOPSGATE-STREET WITHIN), London, and each branch at ST. GEORGE'S CRESCENT, LIVERPOOL.

STEAM TO INDIA AND CHINA, via EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th; and from Suez on or about the 10th of every month.

For rates of passage-money, plans of the steamers, and to secure passages, apply at the company's offices, No. 122, Leadenhall-street, London.

NOTICE TO SHIPPERS OF GOODS AND PARCELS per PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY'S STEAMERS to INDIA and CHINA.—GOODS and PARCELS, sent direct to the company's Parcel-office, at or before 6 P.M. on the 17th of each month, are FORWARDED at less cost to the shipper than when sent through any intermediate channel. Cases must not exceed 112 lbs. weight each for Aden, Ceylon, Madras, Calcutta, and China; and 40 lbs. each case for Bombay. No package for India and China can, under any circumstances, be shipped at Southampton, unless it be cleared through the Custom-house, and placed alongside the steamer by noon on the 19th of each month. Detailed particulars can be obtained on personal application or by writing.—Parcel Department, 122, Leadenhall-street, May 13, 1848.

PATENT PNEUMATIC APPARATUS for the WORKING OF MINES—for the ASCENT and DESCENT of MINERS INTO PITS—EXTRACTING ORES and WATER—and also for VENTILATION.

The object of this patent is the economy in its application of raising ores and weights; at the same time that it is attended with security to life and economy of time. M. PUIS (the proprietor) having secured a PATENT, is ready to GRANT LICENSES for its USE, at a certain annual rate, or for a fixed sum.

All inquiries will be satisfactorily answered on application, personally or by letter, addressed to M. Puis, 32, Craven-street, Strand; Mr. English, 25, Fleet-street; or to the office of the *Mining Journal*, 26, Fleet-street, London.

*** Any proprietor, or gentleman interested in mining property, can obtain a description of Mr. Puis' invention, on application as above.

REVIVAL OF PASSENGER TRAFFIC ON TURNPIKE ROADS—RESUSCITATION of INNS, INNKEEPERS, and TURNPIKE TRUSTS.—PROSPECTUSES for raising a LOAN of FIVE THOUSAND POUNDS, in sums of £10 each, payable by instalments, in aid of the above national object, to be attained by means of Sir JAMES C. ANDERSON'S PATENT STEAM-CARRIAGE FOR COMMON ROADS (now rendered thoroughly effective), for which interest, at the rate of 15 per cent. per annum, will be paid half-yearly, and both principal and interest amply secured by mortgage, and without the lenders incurring the justly-dreaded liabilities of joint-stock companies, will be forwarded free (on the receipt of a postage-stamp), on application to Mr. Herbert, solicitor, 8, Heathcote-street, Mecklenburgh-square, London.

*** The line of road selected to commence running the carriages is from Hyde-park Corner to Hounslow, through Kensington, Hammersmith, Brentford, &c.

CALEDONIAN RAILWAY COMPANY—LOANS ON DEBENTURES.—TENDERS OF LOANS ON DEBENTURE BONDS are now RECEIVED in sums of not less than £500, for any number of years not exceeding five. Interest to be at the rate of 5 per cent. per annum, payable half-yearly, in London, Edinburgh, Glasgow, or in any country bank.

Tenders to be addressed to this office, giving full name and address of lender.—Parties may also communicate with Messrs. Foster and Braithwaite, 68, Old Broad-street, London.

By order, D. RANKINE, Treasurer.

Caledonian Railway Office, Edinburgh, Feb. 25, 1848.

RIDER'S RAILWAY BRIDGE.—TO RAILWAY COMPANIES.—A PROSPECTUS of the above newly-invented IRON TRUSS RAILWAY BRIDGE will be FORWARDED, and CONTRACTS entered into, or LICENSES GRANTED for its ERECTION, on application to Mr. Moulton, Bradford, Wilts.

IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.

W. BROTHERTON AND CO.'S

PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY.

W. B. & CO. have the pleasure to state, that the above article is extensively used in her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and finest pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers.

Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London.

N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

PATENT ALKALI COMPANY'S IRON PAINT.—This PAINT is the PRODUCT of a PATENT PROCESS, and possesses PECULIAR and VALUABLE PROPERTIES, not otherwise attainable.

Its colour (as at present produced) is a rich *purple-brown*. It is perfectly free from the deleterious qualities of white lead.

It surpasses all other paints ever yet discovered, in point of *durability* and *economy*. Two coats of this paint are more than equal to three of any other description.

From its chemical composition, it is pre-eminently adapted for covering *iron*; also *wood*, and *stuccoed*, or *brick buildings*. The process by which the base of this paint is produced, makes it impossible that any change should take place in its composition from atmospheric influence. Its identity with iron secures it from galvanic action, so fatal to the durability of lead and other paints on iron work.

It has been exposed on shipping to the action of sea-water, and of the sulphuretted hydrogen, so prevalent in sea-ports and tidal harbours, for more than three years, without change.

Its *cheapness* and *strength* render it peculiarly suitable for *iron bridges, roofs, and railways, farm buildings, and shipping*. It will also cover creosoted timber.

Price, by the ton, £25, delivered in London, exclusive of packages.

Agents will be appointed for the principal towns in the United Kingdom; in the mean time, orders may be addressed to the offices of the company, No. 20, Fenchurch-street, London. JOHN A. WEST, Secretary.

TO CAPITALISTS, or Persons desiring to enter the IRON TRADE.—The ADVERTISER, having had a long experience in the iron trade, comprising every branch of its manufacture; and having also a small capital at his disposal, is anxious to meet with a PARTNER, who can command from £3000 to £4000. As this is an opportunity which seldom offers itself—inasmuch as it possesses peculiar advantages—early application is requested. The utmost confidence may be relied on, and the highest reference given.—Apply, by letter, to "X. Y. Z.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London; on receipt of which, the advertiser will put himself in direct communication with the applicant.

NOTICE TO IRONMASTERS.—Any GENTLEMAN, of practical experience in the iron-trade, and possessed of a small amount of capital, who is willing to take the MANAGEMENT of WORKS, in the WEST of SCOTLAND, and to FORM a PARTNERSHIP with PARTIES about to enter into the TRADE, under advantageous circumstances, may hear of such an opening, by communicating his name (confidentially) to Bannatynes and Kirkwood, writers, 50, West George-street, Glasgow. July 26, 1848.

THE PROPRIETOR OF A SLATE QUARRY IN THE WEST OF ENGLAND is desirous of meeting with an INDIVIDUAL, or SMALL COMPANY, who will WORK it in CONJUNCTION with HIM, and to whom he offers very favourable terms. The quarry has been opened out, and the slate is of the finest quality; the machinery, &c., is completed, and the only outlay now required is for the wages of quarrymen and cleavers.—Apply (by letter) to "A. B. C. D," care of Mr. C. Barker, 12, Birchin-lane, Cornhill.

WANTED TO PURCHASE—SHARES in East Wheal Rose, Wh. Trelawny, Herodsfoot, South Francis, United Mexican, and Trehane Mines.

FOR SALE—SHARES in Mary Ann, South Caradon, West Caradon, Devon Great Consols, and other Mines—paying 15 to 20 per cent.

Apply to Messrs. Watson and Cuell, No. 1, St. Michael's-alley, Cornhill, London.

N.B.—A FEW SHARES in HUNGERFORD-BRIDGE WANTED.

TO CAPITALISTS—SCIENTIFIC OR OTHERWISE.—WANTED, from FIVE HUNDRED to ONE THOUSAND POUNDS for securing PATENTS in FOREIGN PARTS, for several IMPORTANT INVENTIONS, about to appear before the public (for which the English patent has been obtained). Only part of the above amount is wanted immediately. Any party having the above sum at command, will find this an excellent opportunity for the investment of capital, as ample security will be given, and the most liberal terms conceded to.—Apply to Mr. A. Campbell, 284, Fleet-street.

BOILER EXPLOSIONS.—JOSEPH SPENCER, ENGINEER and IRONFOUNDER, BILSTON, STAFFORDSHIRE, desires to inform all persons using STEAM-ENGINES, that he has constantly on hand a LARGE SUPPLY of his SAFETY WHISTLES, which can be fixed to boilers on the shortest notice.

ASSAYING.—Mr. R. F. MUSHET (son of the late eminent metallurgist, David Mushet, Esq.) ASSAYS IRON ORES and IRONSTONES, of all descriptions, at the charge of 7s. for each assay—giving the metallic contents of each ore with perfect accuracy.—Address: Coleford, Gloucestershire.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,

23, *HAWLEY-ROAD, KENTISH TOWN, LONDON,*

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

MINING SHARE OFFICE.—W. BAWDEN, of No. 2, BANK CHAMBERS, LONDON, MINE AGENT, of 21 years' standing, begs to call the attention of PURCHASERS of MINING PROPERTY to the following SHARES at this particular time—viz.: United Mexican, Bolanos, Del Reys, and Tamars, as there is, from present appearances, every rational prospect for purchasers realising from 50 to 200 per cent., in a few months, on their outlay.—W. B. will be most happy to give every information respecting these and other mining shares.—*Attendance daily from Ten to Four.*

MINING OFFICES—Established Five Years.—THOMAS P. THOMAS begs to inform his friends and the public, that he has REMOVED from No. 18, Threadneedle-street, to No. 3, GEORGE-YARD, LOMBARD-STREET, LONDON (late Messrs. Phillips and Tiplady's).

N.B.—Dealer in English and Foreign Funds, Mining, Railway, Gas, and other shares.

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON,*

Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously upon personal application.—MONEY ADVANCED upon the above securities.

MR. JAMES STRIDE'S MINING, SHARE, AND GENERAL AGENCY OFFICES, 27, *SPRING-GARDENS, LONDON.*

WILLIAM W. TAYLOR & CO., MINERAL SURVEYORS MINING SHAREBROKERS, &c.,

No. 2, ROYAL EXCHANGE-BUILDINGS, LONDON.

JAMES LANE, MINING SHARE DEALER, 75, *OLD BROAD-STREET, LONDON.*

REUBEN FARLEY, MINE AGENT, AND LAND AND MINE SURVEYOR, *WEST BROMWICH, NEAR BIRMINGHAM,* AGENT to the NORTH OF ENGLAND FIRE AND LIFE INSURANCE COMPANY.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MONEY.—MESSRS. KILLICK & CO. (late Winstanley, Killick, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.—6, Bank Chambers, opposite Bank of England.

AUSTRALIAN MINING COMPANY, 1, Adelaide-place, London-bridge, July 13, 1848.—The board of directors hereby give Notice, that, agreeably to the provisions of the Deed of Settlement, the THIRD ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at this office on Monday, the 31st of July inst., at Twelve o'clock precisely, to receive and audit report, accounts, and balance-sheet, for the past year—to elect three directors, in lieu of three who go out by rotation, and to fill up the two vacancies occasioned by the resignation of Mr. Alderman Copeland and Edward Hagen, Esq., and to fix the remuneration of the present auditors for the past year. By order of the board, I. A. JOSEPH, Sec.

ANGLO-MEXICAN MINT OFFICE, 5, Broad-street-buildings, July 25, 1848.—The directors of the ANGLO-MEXICAN MINT COMPANY beg leave to notify to the shareholders, that the DIVIDEND, declared on the 2d May, as payable on the 2d December next, will be PAID, by anticipation, on Monday, the 7th of August, and subsequent days.—Claims to be made (printed forms of which are to be obtained as above) three clear days previous to payment.—Attendance, Eleven to Three.

G. B. LONSDALE, Secretary.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a DIVIDEND of ONE POUND per share will be PAID to the holders of certificates in this company, at the office of the association, 26, Austinfriars, on and after the 3d day of August next, between the hours of Eleven and Three o'clock.—The proprietors are requested to leave their certificates at the office, for examination, three clear days before the day of payment.

By order of the court of directors,

26, Austinfriars, July 25, 1848. WM. LECKIE, Secretary.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that a DIVIDEND of FIVE SHILLINGS per share will be PAYABLE, at the office of the association, on and after Wednesday next, the 2d of August, between the hours of Eleven and Three.—Forms for claiming the dividend may be obtained at the company's office, and must be left two clear days, for examination, previous to payment. By order of a court of directors,

5, Finsbury-circus, London, July 26, 1848. JOHN MATHER, Secretary.

*** The holders of scrip shares will not be entitled to receive the dividend until their shares are registered.

GALVANISED IRON COMPANY'S DISSOLUTION ACT, 1848.—Notice is hereby given, that the directors have this day made a CALL of TWO POUNDS per share, pursuant to the "Galvanised Iron Company's Dissolution Act, 1848," in respect of so many of the 25,000 and 20,407 shares respectively mentioned in that Act as now exist; and that the same call is payable by the respective holders of the said shares on the 10th day of August now next, at the bank of Messrs. Prescott, Grote, and Co., 62, Threadneedle-street, London, and is to be applied for the payment of the debts, liabilities, and engagements of the said company now existing, and those duly incurred in carrying the said Act into execution. By order,

3, Mansion-house-place, London, July 24, 1848. S. VINCENT, Secretary.

BRITISH MINING PROPERTY.

The following petition, signed by upwards of 20,000 persons interested in British mines, is shortly to be presented to the House of Lords, against the bill now in progress on the subject of mining produce:—

To the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The petition of the undersigned lords and adventurers in British copper, lead, and tin mines; and also of the merchants, manufacturers, carriers, agents, miners, shipowners, and others, whose livelihood wholly, or in part, depends upon the prosperity of such mines,—Humbly showeth,

That those engaged in mines of the above description, particularly those of copper and tin, have been long suffering under severe distress, which, but for the timely aid of your right honourable House, they fear will be greatly aggravated by the repeal of an Act affecting such mines, which was passed, after long and great deliberation, in 1842; upon the faith of which Act (notwithstanding the advantages which it conferred on the foreign mines—especially those of copper—to the great and permanent injury to the British mines) having been considered by those engaged in the latter as a final settlement of the law on the subject, vast sums of money have been laid out in improving and facilitating the working of old, and in the opening of new, mines.

That, although in 1842 by such Act a complete change was made in the duties affecting the sale of foreign copper ores, whereby such ores were allowed, after being made into copper in the United Kingdom, to be sold within the same, on the payment of a very moderate duty, instead of one amounting almost to a prohibition, which had then long previously prevailed; and, although such change was principally effected by the influence possessed by the smelters, merchants, manufacturers, and others interested in the foreign mines—the very same parties who had been the cause of altering the law to suit their own purposes (though to the great injury of the British miner), within the following year commenced a system of warfare for the destruction of the very law which they themselves had previously long laboured to obtain; at a time, too, when such altered law had considerably depressed the standard of copper ores, and greatly reduced the earnings of the working miner.

That such opposition to the law, or tariff, of 1842 has been since greatly increased; and among the number of memorials presented to the present Government, assigning reasons for the total abolition of the duties imposed on foreign copper by such law, is one to the late Government, wherein the complainants stated, that "the principal advantages arising out of the existing trade of importing and smelting foreign copper ores in Great Britain are realised by shipowners, merchants, smelters, proprietors of collieries, and collaterally, but in an important degree, by the owners of British copper mines."

Now, your petitioners are prepared to prove, that if the owners of ships trading abroad are benefited by the importation of foreign ores, the moment that such importation so increases as to reduce the returns of the British mines, the consequent reduction of the shipping now employed in carrying ores from different ports in Great Britain to Wales, and returning with coals, iron, and other materials for the working of the British mines, would be a much more serious loss to the country than could ever arise from ships being unemployed in the carriage of foreign ores.

That, inasmuch as the foreign mines are very shallow, and require but little machinery, and other articles of merchandise, to keep them at work, when compared with the British mines, the merchants would sustain a much greater loss by the destruction of British than of foreign mines.

That, as to the smelters' advantage—if the word alludes to the operatives, those who actually smelt the ores—instead of their being benefited by such an increase of foreign ores as would swamp the home market, it is evident that, from the foreign ores being about three times as rich as the British ores, and much more easily fused, or smelted, a great decrease in the number of actual smelters must take place. But, if the term be meant to apply only to the smelting companies, the division of their capitals in the purchase of foreign ores, by supporting foreign industry, is but of half the service to the industry of Great Britain that it would be if employed exclusively in the purchase and conversion of ores being the produce of national industry.

That, with regard to the owners of British mines being advantaged by that which must ultimately render those mines wholly unprofitable, appears completely incomprehensible to your petitioners.

That, the greatest object avowed by the late Government, in altering the law in 1842, was for the encouragement of the smelting of foreign copper ores in this country, and for the purpose of discouraging smelting in other countries. The lowest duties, as a protection to the British copper mines, which it was considered those mines could exist under, were placed on the foreign ores; the Government having determined, if possible, to supply the whole world with copper through the medium of the British smelter. That, in vain, the deputation from Cornwall, and another deputation from the general British copper mining interest, then sitting in London, proved to the Government, that such small protection would greatly damp the spirit of the home mining interest, and that a much higher scale of duties might have been imposed, even as a fiscal regulation, without injury to the English smelter, and, consequently, with great benefit to the country; such being the influence of the foreign miners, that the then Vice-President of the Board of Trade declared his inability to extend such protection without their consent.

That, amongst other reasons which the complainants, in their several memorials, set forth, for taking off such duties altogether, are the following, amongst those printed by order of the House of Commons:—In p. 1, thirty-nine firms of merchants, copper smelters, importers of copper ores, and others, by memorials presented in 1846, complain of "the hardship to which they had been subjected, by the duty levied for the first time, by the tariff of 1842, on the importation of foreign copper ores." On the contrary, previously to 1842, the duties on the sale of foreign copper in this country almost amounted to a prohibition; and the complainants themselves planned and carried the Act for their alteration, in opposition to the utmost efforts of the British miner to prevent it. The same firms also assert, that "the smelting of copper ores in Chili, previous to 1842, had been gradually decreasing, and had nearly ceased—the miners finding it more advantageous to sell, or consign, their ores to the British merchant." On the contrary, it appears, from official returns, that very large quantities of bar copper were smelted and exported from Chili every year, from 1835 to 1845, notwithstanding that in two of these years, after the passing of the Act here complained of, the ores exported from Chili to England amounted to nearly double the usual quantity. Further, the same firms complained, that "on the imposition of the duty in 1842, they expressed their full conviction that the measure was fraught with serious danger to their interests;" to disprove which, among their memorials, will be found printed a speech of their advocate, Lord Sandon, who, within 13 months after the passing of the Act, on rising in his place in Parliament, to complain of its operation, said, "the experiment had already proved the direct reverse of what had been anticipated."

That, in page 4, the Chamber of Commerce, at Manchester, reiterate the same false statement of the tariff of 1842, imposing, for the first time, a tax upon the foreign copper trade of this kingdom.

That, in page 8, 54 firms of merchants, shipowners, importers of copper ore, and copper smelters, make the same unfounded complaint, by their memorial to the Right Honourable the Lords Committee of Privy Council, as to the first levy of a duty in 1842, and their then anticipations of its injurious effects; they also falsely asserted, that never were British mines more prosperous than in 1846! and that to the copper smelter the present system is alike injurious, by unsettling prices, by creating competition from other countries, and by supplying their manufactures from other sources, instead of, as heretofore, concentrating the smelting business in this country. They also complain of measures which had been taken for the smelting of copper ores by other countries; but, from the troubled state of Europe, there is now no chance of such measures being matured.

That Messrs. Gemmell and Brothers, from Glasgow, represented in October, 1843, to John M'Gregor, Esq., that the result of the Act of 1842 had "added largely to the profits of the British copper mine owners;" whereas the British mining interest was then greatly depressed—the average standard of copper ores having fallen from 125*l.* 1s. in 1841, the year previous to such Act, to 109*l.* 8s., in 1843.

That, in page 10, 48 firms of merchants, shipowners, importers of copper ores, and copper smelters, assert—"that the British copper miner is greatly interested by the trade in foreign copper ores being retained in this country; that it is his interest that the whole of the foreign ores should come into the hands, or be under the control, of the British copper smelter, rather than be smelted in France, Chili, or the United States; which countries, having no common interest with Great Britain, would compete with the British smelter; the effect of which would be great and unnecessary competition, and a ruinous depression of prices." That "the advantages which have resulted to the trade and manufacturers by the import of foreign copper ores, do not rest on so great and manifest a superiority in the resources of this country, as to render them free from competition and rivalry from other nations; and this position, contrary to the expectation of all parties connected with the trade, has been lowered by the abolition of the system of smelting in bond, and by the imposition of duties on importation."

That, by carefully attending to the names of those who have signed the above and similar memorials—some asserting that the memorialists anticipated the danger, and remonstrated against passing the Act of 1842; and others asserting, as did their representative, Lord Sandon, that the effects of the Act had been "contrary to the expectation of all parties connected with the trade"—it will be found, that many firms were parties to each of these statements, though directly opposite to each other.

That, strange and contradictory as the foregoing and other memorials are, from the same parties, and their connections in trade, in page 3 is a memorial to the Right Honourable the Lords Commissioners of Her Majesty's Treasury, from 66 firms of merchants, manufacturers, brass founders, copper smiths, metal merchants, &c., from Birmingham, stating—"that there had been, of late years, a great falling off in the export of British manufactured articles of brass and copper, in consequence of the same being supplied by manufacturers of Belgium and France, who have unrestricted import trade in foreign copper and copper ores."

"That the price of copper in this country, notwithstanding the decline in value of the manufactured articles abroad, has maintained a high range for the last two years; and that your memorialists consider that this has been supported by the restricted introduction of foreign copper ore, which is peculiarly adapted to the preparation of fine metal, much required in the Birmingham manufactures."

That the two years above alluded to are those of 1844 and 1845, when the standard of copper was 10 per cent. lower than it was in the year previous to the imposition of the present duties on foreign copper ores; and, with regard to such ores being restricted in their importation by such duties, Mr. Brownall, the chairman of the Liverpool Chamber of Commerce—a South American merchant, and a party to several of the memorials—stated, before the Navigation Committee of the House of Commons, on the 20th June, 1847, "that in 1844, South American copper ores were imported into this country to the amount of 19,363 tons, and in the following year to that of 19,302 tons; which were more than were required for the trade of the country."

That, without quoting further extracts from the numerous memorials presented to her Majesty's Government since 1845, it may be right to state, that several, numerously signed, actually set forth as fact, that the trade in foreign copper ores at Chili, in 1846, had all but ceased to exist; whereas, with the exception of the great importations spoken of by Mr. Brownall, during 1844 and 1845, the imports of copper ore from Chili into this country were greater in 1846 than they had ever been before, with the exception of the year 1837, which slightly exceeded those of 1846.

That, from the facts stated and recorded, there is ample evidence to show that, very soon after the passing of the Act of 1842, the merchants, manufacturers, smelters, and others, who obtained such Act, had determined on obtaining its repeal; for, soon after Lord Sandon complained of its working, two letters from Valparaiso, one in August and the other in October, 1843, were printed amongst the memorials addressed to Messrs. Brownalls, complaining of the working of the Act. Whereas, Mr. E. Budd, a partner of the copper smelting-house of Vivian and Sons, stated in his evidence before the Navigation Committee, on the 20th of June, 1847, "That the smelting trade had been progressively improving till the year 1844, when the change in the law of 1842 came into full operation; particularly as regarded the South American trade. That the alteration was made about the middle of 1842; intelligence of it would not reach South America till the end of 1842, and no change took place in the shipment in 1843, because they did not know whether the result of the imposition of the duty would be to give them a worse return than they had been accustomed to; and they waited to see the result of the shipments. In fact, it produced no change till the result of the shipments made in 1843 was known in Chili."

That, besides the foregoing complaints immediately touching copper ores, the memorialists asserted, that the trade in British goods to Cuba, Chili, Peru, and Columbia, had also greatly diminished since 1842; whereas, it is clear from the public returns, so far as they have been made up, that to Cuba, during the four years immediately preceding the tariff, the exports were 2,337,788*l.*; and during the four years succeeding 1841, 2,469,996*l.* That the imports from the same place to the United Kingdom were, for the four years previous to 1842, 1,782,982*l.*; and since 1841, for the next four years, 2,544,054*l.* That to Chili, the exports from the United Kingdom were, for the four years preceding 1842, 3,887,211*l.*; and in the four years since 1841, they amounted to 4,239,920*l.* And the imports from Chili into the United Kingdom, for four years before 1842, were 627,371*l.*; and for the four years since 1841, 1,520,287*l.* That the exports from the United Kingdom to Peru, for four years preceding 1842, were 2,772,901*l.*; and for the four years since 1841, 3,086,435*l.* That the imports from Peru into the United Kingdom, for four years preceding 1841, were 802,849*l.*; and the four years since 1841, 1,287,820*l.* That the exports from the United Kingdom to Columbia, in four years preceding 1842, were 1,102,157*l.*; and in the four years since 1841, 1,408,542*l.* That the imports from Columbia into the United Kingdom, in the four years preceding 1842, were 863,086*l.*; but in the four years since 1841, they have been 1,743,864*l.*

They also further asserted, that the Chilians felt the imposition of a heavy duty on their produce as a hostile proceeding; whereas, Chili levies duties upon our goods generally to the amount of from 20 to 25 per cent.; and even upon copper it will average as much—their export duty upon copper ore and regulus being 7½ per cent.

That, as to Cuba, she rates all our goods at duties averaging above 25 per cent.; and sheet-copper is charged with a duty of 38*l.* per ton.

That, with regard to the quality of the Chilian bar-copper, it would appear from statements made by the memorialists, that it was just as pure as our own; but, by a statement in the *Bombay Times* newspaper, towards the close of last year, it appeared that 300 cwts. of English copper was there sold, and also the same quantity of South American, and that the English made 31*l.* 12s. 6d. more a ton than the South American.

That, notwithstanding all the material facts advanced by the complainants in their several memorials were so easily to be disproved, it appears that Government attached so much weight to them, as to induce the Prime Minister, in opening the budget in the early part of the session, to announce to the House of Commons—

1. That the effect of the duty on copper, and other concomitant circumstance, have been, that the smelting has been performed in Chili and other places where it had not been done before.

2. That the smelting establishments of this country had greatly suffered in consequence.

3. That he did not think the owners of copper mines in this country would be any sufferers by taking off this small amount of duty.

4. That we may reasonably expect, after taking away the obstacle that arises from this tax, that we should hold out a prospect of something like a revival of prosperity.

To the first point your petitioners beg, in answer, to say that smelting establishments have existed for long periods of years, in Chili, Sweden, Norway, and Russia.

That establishments recently erected at Hamburgh, in the United States, and France, are upon so trivial a scale, that, upon the showing of the advocates for the removal of the duty, "the quantity of copper which was made abroad could not be much more than 20 to 30 tons per week, whilst the quantity produced in this country was upwards of 400 tons weekly."

That all the countries abroad which smelt copper are importers of coal from this country, at prices exceeding the cost of the English smelters, by from 300 to 700 per cent.

To the second they beg to say, that in 15 years, from 1832 to the end of 1847, the increase in the smelting of copper in this country was from 12,343 tons in 1833, to 22,825 tons in 1847—the year of alleged severe depression—being an increase of 10,482 tons, or nearly 85 per cent.

That there has been, from Midsummer, 1842 (the first year of the duty), an almost uninterrupted course of depression in the price paid by the smelters to the British and foreign miners for their ores—the average price in the last three years having been less than that of 1842 by an amount equal to about 12*l.* per ton of copper!

That, whilst the miners' property has been so depressed, the smelters have been constantly raising the price of copper to the consumer; the average price of copper having been less in 1842 than that of last year, by 6*l.* per ton; and the average formed by the mean annual prices of copper in the five years from 1841 to 1846, was less than the average price of last year by 8*l.* 17s. per ton.

That, as an example of the effect upon the smelters' interests, of these combined causes of ores being bought by them so much cheaper, and the metal being sold so much dearer, than at former periods, it may be stated, that upon the 22,825 tons smelted last year, the reduced prices paid for ores, and the advanced rates obtained for the metal, as compared with the buying and selling prices of 1842, made a difference of 18*l.* 5s. per ton of copper, or 416,000*l.* in favour of the smelter upon last year's trade!

With reference to the third point, they submit that the owners of the copper mines of this country would be sufferers by the present duty being taken off; and beyond the facts above detailed, it may be stated—

That so large has been the reduction in the prices paid by the smelter to the miner for his ores, since 1842, that there are thousands of tons of ore in existence in the mines of Cornwall, which, at the present prices, will not pay the cost of raising; and,

That if the duty were removed, considerable shipments of Chilian and Cuban ores, especially of the latter, of an inferior degree of richness to those now sent here, would be made to this country; in which case, further large quantities of British ores, of higher produce than those last above named, would also be left in the mines, from the impossibility of continuing to raise them at a heavy loss.

With respect to the fourth and last point, it might also be sufficient to refer to the statement made above, in answer to the second point, showing the enormous profits made by the smelters, which, for some time past, have been nearly 20*l.* per ton above the ordinary rate.

That the profits of the smelters have never been larger, and, it is believed, not so great, in the annals of the copper trade, as since the year 1842, when the substitution of the present duty for the then existing permission to smelt in bond, took place at their urgent request, and consequently with their full concurrence.

And that, to the immense amount of the smelters' gains, which are notorious to the whole world, may be fairly ascribed the just complaints of the miner and the consumer; and to the same cause may be mainly attributed the desire lately shown by some other countries to participate in advantages of so tempting a nature.

That these are the answers of the British miner to the allegations contained in the statements put into the mouth of the Minister on behalf of the smelters.

That the other grounds advanced in favour of the removal of the duty are those of the importers of foreign ores, and the memorialists of Birmingham, with other parties interested; which, in justice to the British miner, should be thoroughly investigated.

That the following examination of what they advance as facts will show how exaggerated generally, and, in many respects, how decidedly erroneous, are their statements.

They allege boldly, that "copper ore is the only raw material imported for manufacture subject to duty," and ask for a remission of that duty in consequence. What, then, are timber and tallow? both articles of extensive consumption in mines? Certainly both raw materials, and the whole duties on which are now paid by the miner, who, in the last 9 years, has paid duties on tallow and oil amounting to 276,473*l.*, and on timber, 250,007*l.* Until 1842, it was the policy of this country to allow a drawback of a considerable part of the duty on timber used in mines; but the change of law in that respect has imposed upon the British copper miner a tax of nearly 30,000*l.* a year.

They say that the duty levied in 1842 was avowedly "an experiment." But it was not. It was imposed at the urgent request of these parties, as a substitute for smelting in bond; and was assented to, after much discussion, by the miners, very reluctantly, upon the belief that it was to be a permanent measure.

They further allege, that "copper ore from Chili and other foreign countries was almost exclusively smelted in Great Britain previous to 1842;" and that "copper ore smelting had nearly ceased in Chili previous to 1842, when the duty was imposed in Great Britain."

These allegations are wholly untrue. As regards Chili, there are official accounts to prove, that so recently before 1842 as the four years from 1835 to 1839, in addition to 10,000 tons of ore annually exported, on an average, in those years, and nearly all sent to England, there were also exported 2800 tons of bar-copper per annum. Further, there is evidence of large quantities exported in 1842, 1843, and 1844 to France and elsewhere; and there can be little question, although official accounts are not available at the moment to prove it, that, in the short intermediate term between these two series of years, a corresponding, or some considerable, export of bar-copper took place from that country.

Sweden has always been a large copper smelting country. She produced 3000 tons of copper per annum 200 years ago, when we were supplied from that country. Her present smelting is about 1400 or 1500 tons per annum.

Norway produced about 500 tons per annum, and her principal smelting works are British property.

Russia, a few years ago, smelted at least 6000 tons per annum—a trade which was, to a great extent, annihilated by the English smelters. Her production, in 1830 and 1831, was from 3600 to 3700 tons per annum; but her present works, chiefly from the scarcity of wood, yield probably not more than 2500 to 3000 tons, although there were recently 34 copper smelting works in the Uralian mountains.

They go on to state, that "copper is now sent to this country and to France in large quantities, instead of copper ores, which are smelted and converted into copper in Chili;" and that "copper so imported is not consumed in Great Britain, but is exported to the continent, and to Indian markets hitherto supplied by Great Britain."

That a quantity of copper, something larger than usual, has been shipped from Chili to France, in the last two years, is admitted. But our export of copper to that country, in 1846, was 4536 tons, which, although less than the average of the last four years by 719 tons, does not amount to a larger fluctuation than constantly takes place in extensive trades; and 20 years ago our export to France was little over 300 tons, or 1-15th of that of 1846. With regard to the stated "large" imports of unwrought copper into this country, it amounted, in 1846, to 466 tons, and, in 1847, to 512 tons, being upon a par with the average imports of the same article for the last 14 years; and, as the exports of copper smelted in this country were respectively, in 1846, 18,039 tons, and, in 1847, 15,748 tons, it follows that the large exports of foreign smelted ores, in substitution of our own, so strongly set forth, constituted something less than 3 per cent. of the whole quantity.

It is the chief complaint of the parties seeking the removal of this duty, that the importation of copper ores has fallen off considerably.

Granted, in the last year, to the extent of 10,102 tons; but it is equally true that British raised ores also fell off last year 13,571 tons. As regards Cuba, where the decrease has been the most considerable, it is chiefly assignable to two causes—viz.: of certain mines having become comparatively unproductive, and to disputes existing between two English companies and a body of priests, with relation to a part of the property which contains the mines.

They also put forth a statement that, of the money from the Cobre Mines, amounting, in 5 years, to 1,720,652*l.*; there was paid, in wages, to British miners and their families in England, 106,587*l.*; and for coals, machinery, and British manufactures, 32,856*l.*

As not more than one-fourth of the wages so stated to be paid, or 26,647*l.*, would circulate in England (many of the families of the miners gone abroad being in the receipt of parochial relief), the whole amount of circulation in this country, for labour and materials, was 59,503*l.* for the 5 years. Carrying out the computation by the same standard, for 9 years, 1838 to 1846, both inclusive, and extending it to the whole of the foreign mines, the result would show 258,944*l.* as the whole amount put into direct circulation here in 9 years, for labour and materials, in connection with all the copper mines supplying ores to this country.

One mine in Cornwall (and that by no means the largest) put into circulation, in the same 9 years, 581,022*l.*, being an excess, from this single mine, of 322,058*l.*, or 124 per cent., above the entire amount put into direct and active circulation in England, for labour and materials, for the whole quantity of ore imported from every foreign country.

An account has been drawn up, from accurate sources of information, of the value of British copper ore disposed of by public sale in the same 9 years, 1838 to 1846, which was to the extent of 1,379,765 tons, realising the sum of 7,540,443*l.* Of this sum, there was paid, for labour only, 4,634,557*l.*; for materials used in the mines, 1,749,194*l.*; for lords' dues, parochial rates, medical attendance upon the workmen, and other items,

565,533*l.*—making a total expenditure of 6,949,302*l.*; or an annual average of 772,145*l.*, in raising copper ore, of which five-sixths at least is paid for by the labour of British subjects. The foreign expenditure for labour and materials circulated here is something under 6 per cent. The British expenditure and circulation, for the same purpose, is 85 per cent.; and, with lords' dues, and other items, 92 to 93 per cent. of the entire value of the ores sold—a branch of commerce, in fact, which distributes its returns more beneficially than any other in the kingdom; and which, in Cornwall and Devon, actually employs about 22,000 people, who, with their families, make at least 61,000. For those employed in the production of coals, machinery, and materials; the number of sailors employed in the coasting trade; tradesmen, carriers, and others dependent on the copper mines, at least 50,000 more may be added; and if to these be added all who are employed in the tin and lead mines, one-third more may be added to the above numbers.

Your petitioners beg to remind your lordships, that when, 12 months ago, the Government refused to take off the duties from foreign copper ores, the Chancellor of the Exchequer alleged the poverty of the Exchequer as a reason for not doing so; but this year when the Exchequer is in a much poorer state, the diminution of such duty is assigned as a reason why it is not worth retaining! It is, however, singular that, since the intention to take off the duty was known, the increase of the arrivals of copper ores, during the first four months of the present year, over those during the same period in 1847, amounts to 6152 tons; and, therefore, as in the first four months of last year, all the foreign ores imported amounted to but 8959 tons; whereas, this year, they have amounted, within the same period, to 15,011 tons; there is every reason to calculate on a large addition to the revenue, if such duties be continued.

Your petitioners beg further to state that, after the determination of the Ministry became known, as to the removal of the duties on foreign ores, for the encouragement of smelting in this country, a public meeting was called at Birmingham, for the purpose of coercing Ministers to take off the whole duty from copper, as well as from copper ores, that they might be independent of the English smelters; and that, should coals be discovered in any part of the world, near large deposits of copper ores, they might then smelt copper for themselves, even to the ruin of the British smelters, with whom they had, in almost all previous memorials, coalesced, and represented as the proper parties to monopolise the smelting of copper for the whole world.

At that meeting, an agent of one of the copper smelting companies attended, and asserted, that "the Birmingham people misunderstood the practical effect of the duty on the importation of copper ore. The duty, he contended, came out of the pockets of the miners, and was not at all taken into account by the smelters in purchasing." That "the quantity of copper which was smelted abroad could not be much more than 20 or 30 tons a-week, whilst the quantity produced in this country was upwards of 400 tons weekly."

Thus, it was confessed at this meeting, that the taking off the duties from the foreign ores would be merely putting so much money into the foreign miners' pockets; but that, as to any rivalry from foreign smelting houses, there was not the least chance of it; yet, before the Minister had expressed his intention to take off the duties from foreign copper ores, to discourage smelting abroad, both the smelters and the Birmingham people were endeavouring to persuade Ministers that foreign smelting houses were so increasing as would, at no distant time, ruin the English smelter by competition, and that that business would be altogether lost to this country. That it was also avowed, at the same meeting, that the taking off the duties from the foreign ores would enable them to bring home those ores, which would not then pay the duty and freight, but which are reported to be lying on the backs of the Cuba mines in such quantities as must, if brought to this country, very soon swamp all our deep mines, and ultimately ruin the remainder.

That, in 1842, during the passing of the Act, Ministers had at first proposed a lower duty than that of 3*l.* a ton, but altered such proposal, lest a discovery of copper mines in Old Spain might bring copper to this country at a price which would swamp the British mines—the avowed object, not only of the late Ministers, but of the President of the present Board of Trade, being to protect the large capital invested in British mines, and especially to find employment for the large population of Cornwall, whose livelihood solely depended on the prosperity of mining.

Your petitioners, therefore, with mingled surprise and indignation, had, soon after the Birmingham meeting, the mortification to learn, that the threatened agitation had induced Ministers to propose such an alteration of the copper duties as they had demanded, thereby depriving the smelters of the benefits so recently promised by the Minister, and oversetting their grand policy of making England the smelting depôt for the whole world. Nay, if the papers reported truly, the Chancellor of the Exchequer is reported to have said in the House, that, if the Birmingham people had agitated for having the duty on tin also taken off, he would have done it.

Your petitioners cannot but view such encouragement to agitation with great alarm; for, unless your lordships are able to prevent the repeal of the Act of 1842, its repeal must, within a very short period, produce pauperism throughout and beyond the whole length and breadth of Cornwall; and, with so many thousand industrious miners out of employment, and under the impression that they may obtain whatever they will agitate for; knowing, too, that they have been deprived of their labour by the Government encouraging English merchants to supersede them in their work by the employment of slaves belonging to a foreign nation—who will be answerable for the keeping of the public peace, or the safety of life or property, throughout the mining districts of Devon and Cornwall.

Your petitioners are also prepared to prove, to the satisfaction of your lordships, that a check on mining would operate in a very different way from what it would on agriculture or manufactures. That though both the latter, by increased demands, might be easily resumed, yet, if our deep mines are once closed, they may be considered as closed for ever; and should war, or any other cause, create a demand for copper, when supplies from other countries could not be had, it would be found, when too late, that neither the ability nor the means would be available for re-opening mines which have so long contributed as much to the prosperity of Cornwall as the mills have to that of Lancashire, but without producing the evils which Parliament have had to correct in that county.

That your petitioners are fully prepared to prove the facts stated in this petition at the bar of the right honourable House. And on their proving, that the professed object of almost all the memorials and other documents submitted to the Government was to warn the Government against a continuance of the duty, lest the smelting of copper ores should be so increased elsewhere as to come into competition with, and thereby injure, the English smelter, and that both the last and the present Government avowed their determination to support the smelting of copper ores in this country, they trust that your Lordships will never sanction a departure from such intentions, merely because the Birmingham people threatened her Majesty's Ministers with opposition, unless they would consent to extend the ruin which they had previously announced, against the British mining interest, and to the smelting interest also; thereby placing in jeopardy, not only the British mining interest, but also her trade in copper.

That, with regard to the attacks on the duties on foreign copper ore, they trust that they have, from the memorials themselves, sufficiently shown, that they cannot be supported; and that, though the Act of 1842 was procured by their opponents, they had concocted measures to get it repealed before that Act had had any trial.

That, as they are prepared to prove their whole case, they trust that your right honourable House will not refuse them a hearing, and that your lordships, if satisfied with their proofs, will, by dismissing the bill, allow no change in the duties on foreign lead, or foreign copper ores, or foreign copper, to take place.

And your humble petitioners, as in duty bound, will ever pray.

THE BREAKWATER QUARRIES.—The vast improvement effected in the mode of blasting limestone rock in this port, within the last 37 years, is almost surpassing belief. In 1811, when the breakwater quarries were first opened, under the able superintendence of Mr. W. Stuart, the superintendent engineer of the breakwater, only small quantities of rock were blasted at a time—and even then the operation was one not altogether free from danger to the men engaged in it. The march of improvement has, however, not been lacking in this department of mechanical labour, and year after year has, therefore, witnessed a progression in it. But our readers will, nevertheless, be surprised to find that last week, with a charge of 1 cwt. of powder, placed in a hole in the rock, 18 ft. deep, no less than 1000 tons of limestone rock were blasted at one blast, and that, too, without any accident occurring to the man engaged in firing the rock. He was six hours engaged in the operation, and was seven times pulled up from the side of the hole to the top of the quarries, before the fire took effect, and this huge blast was made. The result is still, in part, visible in the quarries. —*Plymouth Times.*

Mining Correspondence.

ENGLISH MINES.

ANTIMONY AND SILVER-LEAD.—Capt. Chas. Williams (July 24) reports—We have commenced stoping away our lode, and have a good pile of lead ore on the surface, which we are dressing ready for market. We cut a fine lode on Monday last, about 2 ft. big, carrying by its walls a beautiful blue lead killas, with some fine stones of copper, lead, mundic, and spar in the lode, underlying about 1½ ft. in a fm. We also cut another lode on Friday last, the same size, underlying west, with a fine soft spar, gossan, and some spots of ore; this lode is underlying differently from either of the other lodes cut in the Marlborough adit, and will, no doubt, be carried towards the east by the lode we have about 40 fms. further to hill—being a much larger lode; so that, by getting our engine-shaft down to the 40, we should have to drive but a short distance to intersect all our lodes on either side of the valley—those on the eastern side underlying west, and those on the western side underlying in an opposite direction; so that we may anticipate, at the junction below, bringing up large quantities of ore. Indeed, Capt. Buzzo, who is here from the west, and who has had much experience in extensive mines in that part, has no doubt but we can keep 40 or 50 hands constantly dressing ore for market, on intercepting the lodes in the 40.

BARRISTOWN.—Capt. T. Angove (July 21) reports—The lode in the adit end east is 4 ft. wide, composed principally of gossan, producing about 10 cwts. of lead per fm. The lode in the 16 fm. level end east is large and irregular, which is occasioned by a floor of broken clay slate intersecting it, and what the mine in every part is subject to—it is producing some saving work; in a few fathoms east from the present end we shall get out of this floor. The winze, sinking in the bottom of the adit level, east of Nangle's shaft, is down about 3 fms.; the lode in it is from 3 to 4 ft. wide, producing about 10 cwts. of lead per fm., with very favourable indications; the pitches look much the same as last reported.

BEDFORD UNITED.—Capt. James Phillips reports—At Wheal Marquis, the engine-shaft is 3 fms. 2 ft. below the 90 fm. level—ground still favourable for sinking. In the 90 fm. level east, we continue to drive by the side of the lode, but shall take it down, so as to report its value next week; judging from appearances, where the lode has been partially cut into on the south wall, we have every reason to expect a good profitable lode; the lode in the stopes, in the back of this level, is worth 60*l.* per fm.; the 90 west, and the 90 cross-cut south, are progressing towards each other favourably. The lode in the 80 fm. level east is 18 in. wide—good saving work. In Hodge's winze, in this level (communicated to the rise by a borer hole), the lode is 3 ft. wide—good work. The lode in Evans's winze, in the 70 fm. level, is 18 in. wide, producing 1½ tons of ore per fm.

CALLINGTON.—Capt. J. T. Phillips (July 24) reports—Kelly Bray engine-shaft is nearly 8 fms. below the 35 fm. level; the lode is just now come in the shaft; we have not yet cut through it; the part we have seen is 2 ft. wide, carrying a branch of a very promising character, 8 in. big, composed of peach, black jack, fluor-spar, mundic, and copper ores. The north engine-shaft is about 6 fms. below the 100 fm. level—the ground continues hard for sinking; in this level, driving south, we are not yet through the hard bar of ground. In the 90 south we are opening tribute ground; in driving east, in this level, we have not yet cut the cross-course. In the 70 fm. level east the lode is 3 ft. wide, producing stones of copper ores; in the winze, sinking below this level, we have soft ground, and a promising lode, with stones of copper ores; the stopes continue much the same as when last reported on. In the 50 east we have not taken down the lode; the part we have in the end, 2 ft. wide, is producing copper ores—the remaining part will be taken down the latter part of this week. At the south mine, in the 125 north, the lode is 10 in. big, composed of fluor-spar, and producing silver-lead ores; the ground is hard; no lode has been taken down in any other end since last report. The tribute department through both the mines shows a considerable improvement; generally speaking, the men are working with spirit and doing well. We have sampled 85 tons of silver-lead ore, for sale the 2d proximo.

COATLITHE HILLS.—Capt. J. M. Paull (July 25) reports—Since I last wrote I have made a careful examination of the ground at Coatlithe Hills, and have every reason to believe that the old workings do not extend so far as I at first expected. The operations on the principal vein have been confined to small shafts from the surface, which do not extend very far; and, from what I can see, the junction of the two veins does not take place for many fathoms eastward. I have been to the end of the old workings on the small vein, and found it to be from 15 to 18 in. in width, composed principally of spar, with some rider, spotted with ore, but not sufficiently good for me to recommend any trial being made on it, until a lower level be brought up. I have thought it advisable to sink and find the principal vein, which I have put the men to do. They have cut a string about 6 in. in width, which has produced some good stones of ore; and, from the disordered state of the limestone, I think the chief part of the vein is very near, which I hope to ascertain in a short time. The appearances justify our expecting something shortly that will greatly enhance the value of the mine.

COMBLAWN.—Capt. T. Penaluna (July 27) reports—I was again underground yesterday, and find they have opened on the cross-course about 9 ft., which is 3 ft. big, composed of soft clay-slate, spar, and white iron, with spots of lead, of a kindly appearance, underlying 3 ft. in a fathom, carrying its head 20° east of north, and not at all unlikely to be the same lode as they have at the Callington Mines. The water being out in the 20, Capt. Hosking intends putting the men to cut the cross-course in that level, which will be about 2 fms., and will take about 10 days, provided the water is kept out; and, after doing that, I should advise you to suspend all further operations underground until the fall of the year; but, at the same time, keep the wheel at work, and two men to open on the great cross-course at surface.

CWM ERFIN.—Captain Samuel Nicholls (July 22) reports—The engine-shaft is sunk 4 fms. 5 ft.—the lode is not yet in the shaft. The 20 fm. level, west of whim-shaft, is at present poor, but I expect we shall have ore in the end soon, as there is a good lode in the 10 fm. level, about 8 fms. to the west of whim-shaft. The 10 fm. level east is still poor, but I think the lode is more promising than it has been for the last 3 or 4 fms. driving. The stope east of whim-shaft is now producing 6 cwts. of ore to the fm. The stope in the 20 fm. level, east of whim-shaft, is worth 6 cwts. of ore to the fm. The stope west of the east shaft is worth 5 cwts. of ore to the fm. The stope west of the eastern shaft has changed for the better.

DEAN PRIOR AND BUCKFASTLEIGH.—Capt. H. Choake (July 19) reports—There is no alteration as it regards the ground in the engine-shaft since my last report; the sumpmen are getting on with the sinking as fast as possible—sunk, in the past week, 5 ft., besides taking down some high ground. In the winze, sinking below the 30 fm. level, we have commenced cutting through the lode. I am very much pleased with what has been laid open, although we have not as yet discovered the south or hanging-wall; the lode is chiefly composed of mundic, with some spots of yellow ore. Taking into account the favourable change in the lode, and the strata being congenial for ore, we may anticipate most favourable results in the 40 fathom level.—July 26.—The engine-shaft is sunk, below the 30 fathom level, 8 fathoms 10 inches; the ground in the past week has been rather sparry for sinking; but it appears that we are getting through the hard floor of ground, and an improvement is anticipated below; we shall make all the speed we can to get the shaft down to its intended depth; in cutting into the south part of the lode in the winze, under the 30 fm. level, we have a large, strong lode. We have laid open nearly 4 ft.; but have not as yet discovered the south wall; the lode is of the most promising and improved character—that is, composed of a great quantity of mundic throughout, and some capel and calcareous spar—all of which are strong indications for ore, and holds out every encouragement in the level below—being a change in the lode, and spotted with yellow ore.

EAST CROWNDALE.—Capt. S. Paull (July 22) reports—That the appearance of the lode in the 58 fm. level west is very similar as when last reported on; the lode is about 3 ft. wide, composed of capel, spar, prian, flookan, and spots of ore; the lode in the 58 fm. level east is 4 ft. wide, of a very similar composition to the western end, but contains a little more ore. The north lode in the 58 fm. level is of a most kindly description, but not rich; the lode is 20 in. wide, chiefly composed of mundic, and at times good stones of ore. At Rix Hill Mine the tin lode in the adit level, I am glad to state, still continues to hold on good; we have better stones of tin still further south than have been reported upon, consequently the size of the lode is not yet known; a pare of men are engaged to prove this in the next week; it is now worth from 40*l.* to 50*l.* per fm. On Wednesday last we put our new steam-engine and stamps to work at Rix Hill, and are pleased to state that it works exceedingly well, and the tin-stuff accumulated exceeds my most sanguine expectations.

EXMOOR WHEAL ELIZA.—Capts. W. H. Whitford and Thomas Dunn (July 28) report—We have not as yet cut our great north lode, in the 12 fm. cross-cut; but, had it continued its regular underlie, we should have done so—having spent the ground which was supposed to be between the lodes; we find that the stratum, within 6 ft. to the present end, has taken a more perpendicular form; consequently, we expect a corresponding change in the underlie of the lode; we cannot doubt of its being cut in the course of a day or two. The machinery is in good working order; and, with the change recently effected, the water is kept without any difficulty.

GREAT HEWAS CONSOLS.—Capt John Carthew (July 25) reports—A great improvement has taken place in this mine since my last report; there is now a fine run of tin ground to be seen in the back of the 36 fm. level, from Northy's shaft, 120 fms. west, and, from present appearances, should calculate that not less than 12,000*l.* of tin is discovered; and, in clearing the same level further west, very much more tin ground will be discovered; and, there is no doubt whatever, as such ground is left so near the adit level, that in going deeper the quantity and quality will be considerably increased. The 40 men, now working in the present backs, will break about 10 tons of tin this month; and I am convinced, whoever sees this mine properly drained to the 86 fm. level, will find that this will make one of the best tin mines in Cornwall.

GREAT MICHELL CONSOLS.—Capt. T. Richards (July 26) reports—The lode in the 45 fm. level, east of the sump-winze, continues without alteration, containing mundic, capel, spar, fluor, and ore; in this level west, the lode contains mundic, capel, and spar, producing in places good stones of ore. In the 35 fm. level, west of the sump-winze, the lode is composed of mundic, capel, and spar, with a small proportion of ore; in the same end, east of the engine-shaft, the part of the lode being carried from 5 to 6 ft. wide, contains capel, spar, fluor, and in places some good yellow ore.

GWINEAR CONSOLS.—Capt. Hugh Stephens (July 22) reports—The 20 fm. end east is very promising; I daily expect it good; I think there can be no doubt of it, when we get under the orey ground above; the 20 fm. end west is still in the slide. The 10 fm. end east is not so hard as it has been. I hope it will still become more easy; and, if it does, there is no doubt of having it good—being nearly under the fine gossan in the adit level. There has not been much done this week in the engine-shaft—having been engaged in fixing the lifts, &c., and have sunk 4 ft.; the ground is much the same; if it continues favourable, I think the lode will be seen in the 30 fm. level within three months from this time; the pitches are still producing a little ore.

HOLMBUSH.—Capt. William Lean (July 25) reports—The shaftmen are still engaged with their contract, in cutting a plat in the 132 fm. level, which will be completed by the time before-mentioned; the lode in the 132 fm. level, west of the diagonal shaft, is 20 in. wide, composed of mundic, spar, and spots of copper ore. The lode in the 120 fm. level south is 5 feet wide, composed of quartz, prian, and lead, worth 5*l.* per fm.; the lode in the stopes, in the back of this level, is also large, and producing saving work. The lode in the 110 fm. level south is 3 ft. wide, producing about 3 cwts. of lead per fm.; the lode in the stope, in the back of this level, is 4 ft. wide, composed of quartz and stones of lead. The lode in the 100 fm. level south is 2 ft. wide, composed of soft spar, prian, and bespangled with lead throughout. The Flap-jack lode, in this level east, is 2½ ft. wide, composed of mundic, blende, spar, and spots of copper ore—the ground still favourable. The lode in the 90 fm. level south is 20 inches wide—spar, flookan, and stones of lead. We have this day shipped on board the schooner *Stonehaven*, 30 tons of silver-lead ores, purchased by Dr. Somers.

KIRKCUDBRIGHTSHIRE.—The agent (July 22) reports—In the 50 end, west of Stewart's shaft on the main lode, the lode is not so large as last reported on composed principally of carbonate of lime and spots of lead; the north lode is above 3 ft. wide—a strong flookan and calcareous spar, with a branch of lead between. In the 40 end, west of Keith's, the lode is 5 ft. wide—a good rib of lead in the end, yielding half a ton per fm. In the 30 end, west of Keith's, the lode is 3 ft. wide, a fine branch of lead coming in on the north side, yielding three-quarters of a ton per fm.; in the same end, east of Stewart's, a large kindly lode, making near half a ton per fm.

LAMHEROOE WHEAL MARIA.—The resolution of the last general meeting, to sink the two shafts to 50 fms., and then drive and intersect the intervening lodes (six in number), has given general satisfaction to the shareholders, as it appears to be the only legitimate mode of developing the mine, by testing the quality of the lodes at the above depth.—Capt. Tabb (July 26) writes—I send herewith an estimate of our monthly cost for the next six months, amounting to 190*l.* per month, including an estimated consumption of coals of 30 tons. Our prospects are the same as when last reported; the lifts, &c., at the engine and Davey's shafts, are in excellent working order, and our sinking going on favourably; and I congratulate the shareholders upon having determined on proceeding thus vigorously to carry out the objects for which the mine was first set to work and the engine erected. We have not yet taken down the lode in the 30 fm. level, going east, but are driving by its side; after the men have driven the extent of their contract, we will cut into it, and I will let you know its character at once

LEWIS.—Capt. Sam. S. Noell (July 22) reports—The lode in the 70 east is 2½ ft. wide, composed of mundic, spar, and flookan, with a small portion of tin. The lode in the 70 west, on the south branch, is 4 in. wide, and worth 4*l.* 10*s.* per fm.; in the cross-cut driving south, in this level (70), there is no important alteration since my last report. The lode in the 60 east is 2½ ft. wide, composed of peach, mundic, with a soft spar, and stones of tin, in the midst of favourable strata. The lode in the 60 east, on the south branch, is very much improved since my last report—now worth 5*l.* per fm.; in the same level west, on the south branch, the lode is 3 ft. wide, and worth 30*l.* per fm. The lode in the 50 west, on the south branch, is 8 in. wide, and worth 3*l.* per fm. In the 40 east, on the south branch, the lode is 8 in. wide—saving work for tin. The south lode, in the 20 east, is 10 in. wide, yielding good quality tinstuff; the south lode, in the 10 east, is 1 ft. wide, producing fair quality tinstuff.

POLSAITH CONSOLS.—The committee of management having met, by appointment, on the mine, on the 12th inst., report—On examining the mine, we found the engine-house and engine erected; it commenced drawing from the Trebetherick shaft about a month before. The driving both ends, in the 12 fm. level, north and south, had been resumed; it commenced working in the Tinner's Hill shaft on the 5th inst.; the miners had commenced working on the lode there, but had not then cut through it. The engine works most satisfactorily, drawing the water out of both shafts, being fixed between the two, working about 220 fms. of flat-rods at a small consumption of coals, not much over 3 cwts. per day. We found two lifts of pumps had been purchased—one from Duchy Consols, the other from Sark—in excellent condition, at a price but little more than half the cost of new—the present deplorably depressed state of mining affording such opportunities. The same remark applies to the other materials generally—they appearing to be of good quality, procured at a small cost, as compared with new. In the general working of the mine, we are of opinion, that in its several parts it has been prosecuted in a skilful and mineral-like manner, with all due economy, in a way, and with a view, to the permanent working of the mine—the extent of the sett, and the appearances altogether, fully justifying such a mode of working. Capt. Faull, with Capt. Bishop, of Pentire Glaze Mine, state—We have this day (the 12th inst.) minutely inspected the mine in the south end, at Trebetherick. We find the lode divided into five parts—the western part carrying a good branch of lead, about 7 in. wide, appearing to master the others. We expect, when the branches in the other parts, which are dipping towards it, fall into the western part, the lode will become still more valuable; the lode varies from 2 to 3 ft. in width. The lode in the north end is very kindly, about 2 ft. 6 in. wide, 8 in. of which is saving work. We have not yet cut through the lode at Tinner's Hill; we can say it is large, and equal in promise, as when seen in the adit level; they have driven into it 4 ft., but have not yet reached the east wall; the lode is composed principally of quartz and prian, with blende and copper ore intermixed, which, in this neighbourhood, are considered sure harbingers of lead. We believe the time is not far distant, when this mine will become independent of the shareholders for support. In a letter of the 21st, Capt. Faull adds—Our south end, at Trebetherick, is still good; four branches have intersected each other—the other branch fast making towards that in the main part of the lode. We have good work, 18 in. wide; the general appearance of the lode is very kindly indeed, leaving a good lode in the back and bottom. The north end is just as last reported; nor do I expect any great alteration in it, until we get through the hard bar of ground which appears in the adit above us. We drew to surface yesterday 27 whim-kibbles of very good work; we are clearing up a winze over our south end; when that is holed we shall be in a position to stope the backs. We have cut through the lode at Tinner's Hill, and find it 8 ft. wide, of a very kindly character, composed of quartz and gossan, with copper ore, blende, and lead intermixed. I am still sanguine in my expectations, that the lode here will produce a bundle of lead. I hope, in a week or two, to be able to inform you nearly the time we may expect to sample.

SOUTH DOLCOATH.—The mine agent (July 24) reports—Early on Saturday morning I went underground at this mine, and found the lode in the shaft to be much improved—it being about 2 ft. wide, with spots of ore, 1 ft. of which is saving work. I will forward you by the steamer to-morrow some excellent stones of grey ore, which were broken from the north part of the lode; the ore is of a rich quality; the nature of the ground is changed, and is now more congenial for copper. The south dropper has not yet fallen into the lode; but we anticipate its shortly doing so.

SOUTH WHEAL BETSEY.—Capt. J. Spargo (July 27) reports—In driving west, to cut the new lode, the ground is still favourable for driving, and the slate more mineralised; the water is very powerful, proceeding from the end, which shows that we are near the lode. In driving east, to cut the main lode, we have just intersected a lode, impregnated with copper and lead, but have only just cut into it, so that I cannot speak positively on it as regards its size or quality; but it appears to be a very large lode, as the men are obliged to enlarge their end to have room, so as to make way for the large quaires, or layers, as it will be much speedier. We think it is a caunter lode from its appearance, but this will be fully known in the course of a few days, the particulars of which I will send you. The water is also very powerful, and the clay-slate thickly impregnated with spots of lead, mundic, and black jack.

SOUTH WHEAL TRELAWNY.—Captain W. Jenkin (July 24) reports—We still continue driving the cross-cut, west of Snell's engine-shaft, in the 30 fm. level, with a full supply of men—ground favourable—in from shaft 9 fms. The engine continues to work well—water just as usual.

SPEARNE CONSOLS.—Capt. John Carthew (July 25) reports—This mine is very much improved in the 50 fm. level driving west—there is a good branch of tin; in the winze, sinking under the 50 fm. level, there is a good branch of tin. In the 90 fm. level west, from Guide shaft, there is a good course of tin ground, worth 8*l.* per fm. In the 100 fm. level west, the end is worth 6*l.* per fm.; in the 100 fm. level east, the lode is worth 15*l.* per fm.; in the engine-shaft, which is now 4 ft. below the 100 fm. level, the lode is 18 in. wide, worth 24*l.* per fm. The mine is looking much better, and no doubt will be a lasting and a very profitable one to all the shareholders.

TRELEIGH CONSOLS.—Capt. W. Symons (July 22) reports—In the 120 fm. level, east of Christoe's, Christoe's lode is cut and driven on 1 fm., the lode is 3 ft. wide, with a kindly appearance—no mineral. In the 80 cross-cut south, east of flat-rod winze, driving to cut a south lode. At Garden's shaft, below the 100, we are sinking in the country; this will require three weeks more to sink to the 110 fm. level; in the same level, west of ditto, the lode is 2½ ft. wide, with occasional stones of ore. In the 90, west of ditto, the lode is 18 in. wide—but little ore; in the 90, east of ditto, east from cross-cut, the lode is 8 in. wide, with a small quantity of ore not to value. In the 80, west of ditto, the lode is 14 in. wide—but not much mineral. In the 70, west of ditto, the lode is 2 ft. wide—very promising, with good stones of ore. In the 60, west of ditto, the lode is 10 in. wide, with good stones of ore—not to value. In the 50, west of ditto, the lode is about 2 ft. wide, with stones of ore only. Wheal Parent engine-shaft, below the adit, is sinking in the country. In the adit, east on Parent lode, the lode is 2 ft. wide, of a promising character, but little mineral. The adit cross-cut, north of east shaft, is being driven to cut Wheal Orphan lode, which we have been daily expecting.

WEST WHEAL JEWEL.—Capt. R. Johns (July 24) reports—In the 70 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is 3 ft. wide, worth 7*l.* per fm. In the 57 fm. level, west of Williams's cross-course, on the same lode, the lode is 3 ft. wide, worth 10*l.* per fm.; in the 57 fm. level, east of ditto, on the same lode, the lode is 1 ft. wide, worth 4*l.* per fm.; the rise, in the back of the 57 fm. level, on Williams's cross-course, the lode on the eastern side of the rise is worth 3*l.* per fm.; in the adit end, west of Hodges's cross-course, on the same lode, the lode is producing stones of ore. In the 30 fm. level, west of Quarry shaft, on Tolcarne tin lode, the lode is 2 ft. wide, saving work for tin, but not rich. In the 12 fm. level, west of Quarry shaft, on the same lode, the lode not taken down in the past week; in the adit end, west of Quarry shaft, on the same lode, the lode is 18 in. wide, producing stones of tin. The tribute department on this lode is looking very well.

WEST WHEAL MARIA.—Capt. T. Rodda (July 25) reports—At the western engine-shaft, the lode in the 74 fm. level west is about 3½ ft. wide, without important alteration; east, in this level, the lode is 2 ft. wide, composed principally of capel, spar, mundic, and spots of ore occasionally—ground favourable for driving.

WHEAL ANDERTON.—Captain J. Carpenter reports—The lode in the 80 fm. level is still large, and producing tin. As there is not much ground opened, I have only one pitch working in that level, at 6*s.* in 1*l.*, with the exception of driving it west by six men daily, expecting to meet with the same shoot of ore. We are sinking on 9 fms. west of the shaft in the 70; the lode in this place is worth 20*l.* per fm.; also, the pitch in the back of the 70 is producing about 20*l.* worth of ore per fm.; we have just intersected the wall of the lode, east of the slide, in the 70, 16 fms. east of the shaft; I hope soon to report there will be a good lode there. The other pitches, in the 70 and 60 fm. levels, are producing a fair quantity of tin to pay the men in their respective tributes—6*s.* 6*d.* and 8*s.* in 1*l.* I shall sample from 10 to 11 tons of tin ore, on Saturday, of good quality.

WHEAL TRELAWNY.—Capt. John Bryant (July 25) reports—Phillips's shaft is sunk 6 fms. below the 62 fm. level, where the ground is much the same as when last reported. The lode in the 62 fm. level north is 3 ft. wide, composed of spar, can, carbonate of iron, and lead, worth 10*l.* per fm.; in this level south the lode is still small, with a good branch of lead in the bottom of the end; we have holed the rise in the back of this level to the winze sinking under the 52, and have now commenced stoping the back, where the lode is yielding a fair quantity of ore. The lode in the 42 north is 2½ ft. wide, worth 10*l.* per fm. The stopes throughout the mine are yielding a fair quantity of ore. We have commenced sinking a winze under the 32 fm. level north, where the lode is worth 7*l.* per ton. There are no changes of importance in sinking Trelawny shaft, driving the 52 cross-cut west, or in the 22 cross-cut east. At the north mine, the lode in the 30 fm. level, north of Smith's shaft, is 1 ft. wide, and worth 6*l.* per fm.; the lode in the winze, south of this shaft, is 2 ft. wide, and worth 7*l.* per fm.

FOREIGN MINES.

ANGLO-MEXICAN MINES.—*Guanaxuato, June 5.—Asuncion.*—We are still prosecuting the destajo, in the frente of San Severo, and, certainly, it entails considerable outlay upon us, and, up to the present moment, with no alteration as regards promise; but the time will soon arrive, when I shall hear from the board on this important subject:—

Week ending May 6.—Memoria	$	367	2	6.—Loss	$	118	1 0
„ 13.—Ditto		437	4	6.—Ditto		162	7 0
„ 20.—Ditto		317	7	0.—Ditto		76	0 0
„ 27.—Ditto		418	6	3.—Ditto		83	6 3
Total loss in the four weeks	$					440	6 3

In all the month 300 cargas were sold, which average $ 7 33 per carga. I have been twice in the mine since I last advised the board, and clearly see, that if the destajo does not help us to profit, nothing else will.

REAL DEL MONTE MINES.—*Extract from a Letter, dated Mexico, June* 12:—Since my letter to the secretary of the 11th ult., I have been most earnestly endeavouring to make every possible reduction in this establishment, with the object, if it can be effected, of bringing its expenditure within the returns. Our present engine cost on the Regla Mines amounts to $2431 per week—a constant outlay which, much as I could desire it, I see no way of diminishing, as long as we continue the deep drainage. Alimentos is another constant cost which we cannot interfere with at present. General expenses, which includes all the accountant and conducta departments, general direction, surgeon, storekeeper, with sundry expenses, not belonging to any account in particular, appear to me at present to admit of no further reduction. These three items—drainage, Alimento, and general expenses, amounting to $3631 per week, then constitute a constant cost, against which the mines have to fight, and cover, if possible, with their profit. I shall now proceed to examine our hopes for accomplishing this. North Regla Mines, including all the workings from Acosta and Sacramento shafts, are at present our best mines; and, unfortunately, besides Moran, the only one at all likely to assist us. I have here suspended every kind of dead or discovery work, and reduced our extraction to the best points of the Santo Brigida and Acosta lodes. The worst feature in the mine is, that nearly all the best ores, and about half the azogue, come from the lower workings, generally known by the name of La Luz bottoms, which is a fine piece of orey ground some 100 varas long, but now worked down to within 5 varas of the back of San Enrique, our lowest cross-cut to the Santa Brigida. This remaining portion of ground will, in Captain Skinfill's opinion, not last more than three months more, until we work down to the level of the water, and then our best resource is gone. The other half of our azogues are extracted from different points on the Santa Brigida vein above the Aviadero adit, and mostly in the neighbourhood of Sacramento shaft, and are likely to be continued for a long time. Captain Skinfill is also of opinion, that some quantity—say, 200 or 300 cargas per week—of poor ores could also be raised at a moderate cost from the other workings on the Santa Brigida; but as of this class of quemason ore, assaying 7 mcs. per monton, we have already at the surface at Acosta and Sacramento some 6000 cargas, I do not consider it at present desirable to incur the cost of raising more; but prefer making up the hacienda deficiencies from this pile.

At South Regla Mines, including the Biscaina and southern workings on the Santa Brigida, I had fully contemplated suspending all the deep drainage on the Biscaina, and limiting the Dolores engine to the vertical shaft, by which it would be released from all the heavy load and friction it now has on the diagonal, and by horizontal rods to San Bartolo winze, and which was only continued with the object of trying the Biscaina vein in continuation of the last San Enrique bunch, on the other side of the slide, caused by the flookan vein crossing the Biscaina. At a meeting of all our agents, which I had a few days after sending off our last despatches, with a view of hearing their opinions as to the best plan for reducing our mining costs, they all insisted so strongly on the importance of this trial, that I was induced to continue it some short time longer; and, on the following day, accompanied by our chief agents, Capts. Skinfill and Rabling, I went down to inspect it myself. The large flookan lode, which is between Terreros and San Cayetano, is found to the southward of the Biscaina, crosses it between the latter mine and Dolores, after which it is known to the northward as the Resurrection lode; it is at this crossing, in the Santa Teresa level, that the last bunch of ore, called San Enrique, was lost. But the disturbance here is rendered a still more complicated one, by the flookan also crossing the Biscaina, by underlay as well as direction, where, after passing to the south of the flookan, the San Pablo winze was carried on, for some distance, in the porphyry rock of the country, without any sign of vein. The vertical winze, under Santa Teresa level, was commenced on the flookan, which has no w gone to the north, and in the bottom of winze we only meet with small strings of quartz, running with porphyry. The general opinion is, that by sinking we shall soon fall in again with the Biscaina, which is probably hove by the flookan, something like in sketch; and, having been lost in good ore, experience leads us to hope we may be so fortunate as to find it again in the same state. Our point of greatest hope is in Santa Teresa level, east of San Pablo winze, where, having driven 20 varas on the flookan, appearances induced a cross-cut to the south, which again discovered the Biscaina vein, which, though at first much disordered, has gradually improved as the level advanced eastwards, and is at present in the end a fine promising lode, 2 varas wide, and still opening out to the southward; but the ores, though good in appearance, only assay from 8 to 10 marcs per monton. Our hope is, that they will improve as the Biscaina increases its distance from the flookan. This trial to the eastward, and in depth, is one of so much promise that I shall indeed regret being obliged to abandon it before obtaining a result; for, could we again fall in with a continuation of the San Enrique bunch, as good as above, it would relieve us from our present difficulties, and give new life to the concern. This is the only point we are at present working on the Biscaina, but the Santa Brigida, in the San Andres level, yields a small quantity of azogue ore, which, joined to that of Santa Teresa, helps to cover the cost of this district.

Santa Ynez Mine is, I fear, at present, giving us but little assistance; for, though on my arrival here I was led to expect that it was capable of yielding large quantities of moderate ley ores, and at a small cost for extraction, yet the result of its working does not seem to prove the fact.

At Moran Mine, I have also suspended all dead works, except carrying down the two shafts, and going on with the erection of the new engine.

UNITED MEXICAN MINES.—The following advices have been received:

Report on the State of the Workings in the Mine of Rayas.—May 27.

La Purisima.—There is very little to remark in regard to this well-worked-out portion of the mines. The buscones employed therein get poorly paid for their work, and would leave the mine, could they find better employment elsewhere.

San Pio, Los Reyes, and San Cayetano.—From these workings no ore is now extracted; but from Cayetano we may obtain some good ore, and a larger portion of ordinary, as soon as the roof is secured, by filling up the open spaces for which operation material is wanting.

Santa Cecilia Cross-cut.—This work has advanced in the 4 weeks 5·36 varas, without any notable changes. If, in the next month, nothing decided is found, I would propose driving to the south-east, along some one of the many ramifications of the vein already cut through.

Santo Toribio.—In these workings are now concentrated the work and interest of the mine. The ventilation is concluded as far as required for the present extent of workings, and has answered my expectations. The lights burn clear, and the smoke of the powder is soon carried out. In these works 80 barmen are employed—of which 70 are on ore, and 10 on speculation. To the north-west we have had two ends driving, one below and one above the general level of Santo Toribio—both are poor, and the uppermost is now suspended. We have now two rises going up nearly parallel, and at a short distance from each other—generally poor, but giving some threads and small bunches of good ore. The ends to the south-east, commencing with the uppermost, are Iesus, Santo Toribio, San Miguel, and Dolores—all in good ore, but presenting itself in different parts of the vein—sometimes concentrated near the lower wall, and at others ramified, in four or five varas width of vein. The end of San Miguel is most advanced to the south-east, and a week since was looking rather discouragingly; but has since improved. The advanced pit of Santo Toribio continues giving good ore in the south-east half, and shows a decided inclination of the "clavo" (rich masses), to the south-east in descending. The pit of St. Alejo has communicated with Dolores, and will be continued from that level downwards. So far as this division of the vein is developed in their working, the inclination is 35° from the horizontal—that is, 10° more underlay than the average of the vein. The general direction is south-east 65°—that is, closing towards the lower divisions of the vein; the water has been lowered in the last four weeks 6·03 varas.—S. P. Parkman.

UNITED MEXICAN MINING ASSOCIATION.

The half-yearly meeting of this company was held on Wednesday, the 26th inst., at the offices, in Finsbury-circus, and was well attended.

Sir J. Easthope, Bart., in the chair.

Mr. Mather (the secretary) read the report of the directors, as follows:—

REPORT.

The directors beg leave, in the first place, to remark that the unsettled state of Mexico, caused by the war between that country and the United States of America, has much impeded the operations of the company; but that evil, by the ratification of the treaty of peace by the two Governments, will, it is to be hoped, now speedily be terminated. The result of operations in the—

Mine of Rayas—In regard to the new workings undertaken, is that Santo Toribio has proved to be of a most important character, both as respects the extent and produce of the lode. In the other parts of the mine nothing particular has as yet presented itself, but the workings commenced in the new ground are very encouraging. During the greater part of the past year much difficulty was encountered, and considerable outlay incurred in keeping down the water in the great shaft, so as to enable the men to prosecute the lower workings; but, this difficulty having been overcome, the water is now gradually decreasing.

The result for the past year has been as follows—viz.:

Ores raised on mine account, and remitted to haciendas	*Cgs.*	23,709
Ores raised by buscones, and sold on joint-account		18,160
Total cargas		41,869

The amount of the association's coinage, for the year—				
1846, was	$	757,681	3	2
1847, was		922,115	7	0
Increase in 1847	$	164,434	3	6

New Mines.—The unsettled state of Mexico has prevented any progress being made in regard to the acquisition of new mines; that difficulty, however, it is to be hoped, is now removed, and it will be one of Mr. Shoolbred's first efforts to secure the possession of one or more good mines, if he can obtain such as are of undoubted productiveness.

Haciendas.—Of these establishments at present worked, consisting of Duran, Barrera, and Dolores, the former only is the property of the company, the latter two are held under contracts which will shortly expire, and it is doubtful whether the owners will renew them again.

Zacatecas.—The claim on the Mexican Government, arising out of the San Acasio law suit, so long in abeyance, Mr. Shoolbred is duly urging on the attention of Mr. Doyle, the Chargé des Affairs of her Majesty in Mexico; and if he does not now make satisfactory progress, the directors will not fail to press it on the attention of her Majesty's Government at home.

The total amount of returns on the general operations of the company, for the past year, was as follows—viz.:

Realised in the reduction of ores at the haciendas of Barrera and Duran	$	13,142	5 5
Realised on quicksilver		23,151	2 6
Premium on gold coin and profit on stores, &c.		463	7 6
Balance of bullion and specie shipped to London		1,229	1 4
Interest received on sundry accounts		5,757	0 6
	$	43,744	2 3
Amount received on account of Rayas debt		7,620	3 6
	$	51,364	6 1
Less expenses of management, agencies, law charges, postages, &c.		23,822	2 5
Total	$	27,542	3 4
Or, sterling, at 42d. per dollar	£	4,854	17 11

The total amount of property, supposed to be good, belonging to the company in Mexico, as estimated on the 31st December last, was—

Buildings	$	54,361	1 7
Stores		159,196	6 1
	$	213,558	0 0
Cash advanced to the owners, on account of profits of the mine on hacienda contracts, and for account of current expenditure		139,565	2 6
Treasury bonds for Arista indemnity		6,915	3 0
Claims on the Mexican Government, arising from San Acasio law-suit, calculated to 31st March, 1846		289,100	0 0
Debt of Rayas Mine		659,438	5 5
Bought ores for the haciendas		27,055	7 2
Available asset at Guanaxuato		26,479	1 7
Total	$	1,372,112	4 4
Or, sterling, at 42d. per dollar	£	240,119	13 11

The available assets in the hands of the manager at Guanaxuato, as per accounts last received, were				$	65,110	2 5
And to which is to be added, the value of 450 bottles of quicksilver, since then shipped	£6130	19	0			
And also of 200 bottles more, to be shipped per packet on the 1st of August	2575	0	0 about		43,000	0 0
Which gives an asset in the hands of the manager of				$	108,110	2 5

Management in London.—James Mackillop and John Hibbert, Esqs., are the two directors, and John Hibbert, jun., Esq., is the auditor, who go out of office by rotation; but, being eligible, are severally candidates for re-election.

Finances in London.—The following is the account of receipts and payments, from 31st Dec. last (when the accounts were audited), to the 25th July inst.:—

An Account of Receipts and Payments, from 1st January to 25th July, 1848.

RECEIPTS.

Brought from account audited to 31st December, 1847	£	14,174	16 4
Interest on Exchequer Bills sold and exchanged		693	8 7
Transfer fees and discount on stamps		11	15 6
Total	£	14,880	0 5

PAYMENTS.

Amount charged to the manager in Mexico, for quicksilver shipped, and other payments, in respect of which he is to account—viz.:						
450 bottles of quicksilver	£6130	19	0			
Sundry payments	453	7	7	—	6,584	6 7
Office expenses					772	19 9
First dividend					203	5 0
Second ditto					243	0 0
Exchequer Bills on hand, and cash at bankers					7,076	9 1
Total				£	14,880	0 5

To this balance of				£	7,076	9 1
Add the remittances just arrived—viz.: $70,000, or, sterling, about				£	14,200	
Bills of exchange for					2,000	— 16,200 0 0
Total asset on hand of				£	23,276	9 1
But subject to the—Auxiliary capital, unclaimed			£1102	0 0		
Red scrip	ditto		1532	15 0		
First dividend	ditto		1284	15 0		
Second ditto	ditto		1027	15 0		
			£4947	5 0		
And payment of 200 bottles quicksilver, purchased for shipment			2575	0 0	— 7,522	5 0
Leaving a disposable asset of				£	15,754	4 1

The Chairman said, in proposing that they receive and approve of this report, it became his duty to draw the attention of the proprietors to two subjects particularly; the first was, the state of the mine of Rayas, and the state of their finances. The directors had avoided in the report that wordy description of the mines, which would, perhaps, be only half understood, and had stated that the result of the operations at Rayas—that was of Santo Toribio—was of a most improving character, both as respected the extent and productiveness of the lode. Perhaps he could not do better than refer to a letter the court had received from Mr. Shoolbred, dated at the city of Mexico, the 12th June, wherein he speaks of the brilliant prospects of the mine, and urges the immediate resumption of the monthly shipments of quicksilver, which the directors had anticipated, by not only getting off 150 bottles, but sending off 300 more, and had 200 for shipment on Monday or Tuesday next—making, altogether, 650, at a cost of between 8000*l.* and 9000*l.* He was happy to state, that the price had been reduced not only to 4*s.*, but even to 3*s.* 6*d.*, which was a very large feature; and the difference from the purchasing of it at 3*s.* 6*d.* in England, and the cost of sending it out, compared with the purchase of it at Guanaxuato, would be about 33 per cent., or a saving of about one-third, in the expense, by sending it from England. (Hear, hear.) He hoped the proprietors would give the board their approbation for having thus anticipated Mr. Shoolbred's instructions, and even gone beyond it; besides, finding that they could still make their purchases at a very low price, they had, consequently, laid in a further store, which, looking at the encouraging reports from the mine, would no doubt be advantageous. He could only say, in reference to the Mexican debt, that, if Mr. Doyle did not make some effectual progress for its settlement, he would avail himself of the opportunity of calling Lord Palmerston's attention to the subject; and he had no doubt, that he should successfully press it upon his attention. The balance of assets, on the 25th July, 1848, was, with the remittance, just received, of 16,200*l.*, a sum of 23,276*l.* If they deducted 4947*l.* for unclaimed dividends on the unrepresented shares, on which they had already paid dividends, and the value of 200 bottles of quicksilver just purchased—making, together, 7522*l.* 5*s.*—from the above sum of 23,276*l.*, it would leave a disposable asset of 15,754*l.* 4*s.* 2*d.* After taking everything into consideration, the directors had great pleasure in recommending a dividend, payable on that day week, of 5*s.* per share, requiring 10,793*l.* 3*s.* 10*d.* out of the 15,754*l.*; he would, therefore, propose a resolution, with the sanction of the proprietors, that a dividend of 5*s.* per share be paid that day week on the 43,000 shares. (Applause.)

Mr. Mattie understood, that the lease of what was now so valuable would soon expire.

The Chairman said, it would not be before 1852; he was sorry it was not a longer time. He could now state, that the finances in Mexico, the estimate of which was fairly and honestly made on the 31st of December, amounted to $1,372,112, which, in sterling, was 240,119*l.* 13*s.* In addition to this, they had available assets in Guanaxuato of $66,000, which had been greatly increased by the quicksilver they had sent over. Thus, the finances, if reckoned in round numbers, and converted into sterling, would amount, according to the late valuation, to about 250,000*l.*

Mr. Mattie asked, if Mr. Shoolbred mentioned anything about the probable remuneration for the future.

The Chairman: They give us facts rather than any views—facts are better than opinions about mines. The concern is in a very productive state; therefore, I have very great confidence, that when we meet again, I shall also be enabled to make another dividend; indeed, I shall be greatly disappointed if I have not the pleasure of declaring as good a dividend next time as at present. Last time we talked of a balance of only $29,000; on this occasion we talk of $65,000. We then only talked about war, and the very bad state of the produce; we now talk about peace, and the prospect of a very large production.

A Proprietor thought it advisable to give Mr. Shoolbred every authority to act for extending this valuable mine, by a vote of the present meeting, as it would save them being called together again.—The Chairman observed, that he had been empowered to take any new mine, but not as a matter of speculation, or that would require money from this country; as to extending the Mine of Rayas, he hoped that might be possible. The deed vested all the power in the directors.

Mr. Mattie thought it was a most questionable policy for Mr. Shoolbred to enter on any new mining engagement; for he could not see how it was possible for him to help involving the company in some degree of expenditure: he would rather that they entered on no fresh mining works till they first ascertained the prospects of the one they now possessed.—The Chairman said, they all knew Mr. Shoolbred's extreme caution in carrying out the wishes of the directors. He had not found, at the date of his last report, any thing new that he had confidence to take.

A Proprietor understood he was limited to 5000*l.*—The Chairman replied, that his instructions were not to disburse a shilling, if he could not give them back the money.

A Proprietor hoped they would not have to wait another six months for a dividend, if they were to have monthly remittances.—The Chairman signified that the directors would be happy to call a special meeting for that purpose.

A Proprietor asked, if it was true that Paredes had occupied Guanaxuato?—The Chairman knew nothing about it—he believed it was untrue.

The report was then adopted, when Jas. Mackillop and John Hibbert, Esqs., were re-elected directors; and J. Hibbert, jun., Esq., was re-elected an auditor.

A vote of thanks was then passed to the chairman and directors, when the meeting adjourned.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.

At a half-yearly general meeting of the proprietors of the association, held at the offices of the company, 26, Austinfriars, the 25th day of July,

Russell Ellice, Esq. (chairman), in the chair.

The advertisement convening the meeting having been read, the following report was read:—

REPORT.

In conformity with what has been stated in their former reports, the directors are happy to say, that the produce of the mines has gone on increasing in quantity, and improving in quality, since they last had the pleasure to meet the proprietors. The produce of the mines for the year 1847—the audited account of which is now laid before you—exceeds that of the preceding year by 1300 tons; and the quality being likewise materially better, the account exhibits a profit of 22,902*l.* 8*s.* 6*d.* on the year's working; and a dividend of 12,000*l.* having been paid in January last, the directors now declare another dividend of 1*l.* per share, payable on and after Thursday, the 3d of August.

Since the beginning of this year, the augmented produce of the mines has been more marked than it was last year—8929 tons having been raised in the first five months of this year against 6714, for the same period of 1847; and the quality of the ore also sustains its superior degree of richness.

The directors, however, are sorry to say, that the disturbed state of France, and of the rest of the continent, has, for the last few months, occasioned a stagnation in the copper trade—the consequence of which has been, that the price of copper, and of copper ore, has fallen materially—so much so, that the directors are reluctant to bring the ore forward for sale. But for this stagnation and fall in price, the dividend, on the present occasion, would have been 2*l.* per share, instead of 1*l.* per share. Under these circumstances, their hope is, that the good sense of the people of the continent will soon prevail over their revolutionary enthusiasm; and, having obtained every reasonable concession from their Governments, that tranquillity and confidence will again be restored, and commerce revert to its accustomed channels.

It is pleasing to the directors to be able to inform the shareholders, that a bill was introduced into the House of Commons—more than three months ago—to reduce the duty on the importation of foreign copper ore (a resolution having previously passed in conformity therewith), leaving only 1*s.* per ton to be levied on its importation in future; but the directors are sorry to say, that no progress has since been made with the bill—though, no doubt, it will receive the Royal sanction during the present session.

The directors have nothing new to communicate in respect to any appeal that the Santiago Company may make in the Sanctuary Ground question—any such appeal on their part being entirely hopeless. The directors continue to be satisfied with the management of their agents in Cuba, and that they exert themselves to introduce every practicable economy into the expenditure.

It was then moved, seconded, and carried unanimously,—

That the report, now read, be received and adopted.

That the thanks of this meeting be given to the chairman, for his courteous conduct in the chair; and to him and the directors, for their able management of the affairs of the association.

DEVON AND COURTENAY CONSOLS MINING COMPANY.

A general meeting of adventurers was held, at the mine, on Tuesday, the 18th inst.,—Philip Lyne, Esq., in the chair.—The captain's report having been read and adopted, the accounts were presented, showing—Balance, when all calls are paid, of 251*l.* 4*s.* 7½*d.*; received for lead ore, since the accounts were made up, 25*l.* 18*s.* 1*d.* = 277*l.* 2*s.* 8½*d.* The register book was produced, showing number of shares, 845; the statement of liabilities showed same amount as calls now due. A call of 5*s.* per share was made, and thanks passed to the committee and chairman, when the meeting adjourned.

The following report, from Capt. N. Seccombe, was read to the meeting:—

July 18.—Since our last general meeting, we have completed sinking our engine-shaft, from the 40 to the 50 fm. level, cut a plat, and driven east 3 fms. 1 ft. 3 in. towards the eastern part of the cross-course, and which we are in the daily expectation of cutting. On this we intend to drive, to intersect the south and gossan lodes from the underlie, of which, in the level above, there cannot be more than 5 or 6 fms. to drive (after we cut the cross-course), and, in favourable ground, it can be accomplished in about a month. In the end driving between the western and eastern part of the cross-course, the ground presents a kindly appearance, being interspersed with branches of spar, mundic, and stones of ore. In the 40 fm. level, we have driven east, on the south lode, 3 fms. 4 ft. 9 in.; we then intersected a slide, on which we have driven north 7 fms. 2 ft. 3 in., to cut the gossan lode further east than it has hitherto been seen in this level; this will be done in about 2 or 3 fms. further driving: in the same level, we have driven west, on the gossan lode, 6 fms. 1 ft. 6 in. on a lode, composed of spar, mundic, and ore, mixed with killas. This level is intended to be continued west, for the purpose of exploring the lode under the Great Gossan Pits, in the wood. We have also, in the bottom of the 40 fm. level, sunk a winze 4 fms., which is now suspended, until the lode is cut in the level below. The ground, east and west of the winze, is now set on tribute, at 10*s.* in 1*l.* Upon the whole, I think there is every probability, that, in the bottom level, we shall have an improvement in those lodes when cut; and that a few months will bring our level, driving west, in the 40, amidst those rich deposits of ore under the gossan pits.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

The annual general meeting of proprietors was held, pursuant to advertisement, at the offices of the company, on Friday, the 28th inst.

N. P. CAMERON, Esq., in the chair.

The advertisement convening the meeting having been read, Col. CAMERON proceeded to address the meeting, to the effect that, although largely interested in its prosperity, he was not entitled to be present, not being a shareholder. He was, however, in the hands of the meeting, and would readily remain, and answer any questions which might be submitted, should such be their pleasure. —A ready assent being given, the business of the meeting commenced, by a protest being laid on the table, to the effect, that the meeting was not legally convened, and that the proceedings thereat were not binding—such protest being signed by Messrs. S. Wood and C. Jones, two shareholders.

The report of the directors was then read by the SECRETARY, as also a report, which was distinct, on the railway—the operations of the company, so far as that department was concerned, being subject to the especial clauses of the Act of Parliament.—The following is an abstract of the accounts submitted:—

To shareholders capital, to June, 1848			£40,376	0	0			
Shares appropriated to vendor			78,280	0	0	118,656	0	0
Bonds payable in 1851, on account of purchase						8,000	0	0
Purchase of mining property			£148,000	0	0			
Ditto plant			2,000	0	0			
			£150,000	0	0			
Amount of shares, as above		£78,280	0	0				
Cash		4,951	3	8				
Bonds		8,000	0	0	91,231	3	8	58,768	16	4
Loans								3,750	0	0
Accounts and liabilities								3,027	2	4
Bills payable								3,334	9	3
Profits on sale of coal					£3,961	1	3½			
Less dividend					2,356	17	0	1,604	4	3½
Total								£197,140	12	2½
By purchase of property								£148,000	0	0
Working stock								7,808	0	6½
Permanent work								5,618	2	0½
Purchase of vessel and sundries								1,418	16	8
Stock of coal								4,676	19	1
Sundries								175	0	7
Railway expenditure, 3937*l.* 14s. 9d.; engineering exp., 1178*l.* 19s. 11d.								5,016	14	8
Law expenses and Parliamentary charge								1,869	7	2
Preliminary expenses—General expenses					£2529	16	4½			
" "	Advertising				368	6	2			
" "	Salaries				1649	10	5			
" "	Interest to vendor				1510	0	0			
" "	Ditto, other parties				442	9	0			
" "	Royalty				2716	13	4			
" "	Taxes				92	18	10	9,309	14	11½
Interest to vendor					£2894	14	4			
Ditto, other parties					738	3	7			
					£3632	17	11			
Less arrears of calls					85	6	0	3,547	11	11
Royalty, to 30th June, 1848, 2200*l.*; taxes, 102*l.* 7s. 10½*d.*								2,302	7	10½
General trade expenses								1,681	16	9
Direction, to 30th of June, 1847—amount taken in shares				£1644	19	2				
" "	ditto in cash				328	4	0	1973	3	2
Salaries, to 30th June, 1848								1426	3	7
Cash and bills at bankers								2216	13	1½
Total								£197,140	12	2½

REPORT.

The present being the third annual meeting of the proprietors of this corporation, the directors think it expedient, for the satisfaction of the proprietors, to take a brief retrospect of the position in which they have been placed, and of the various operations which they have carried out since the establishment of the company in November, 1845. One of the first objects to which the attention of the directors has been called, has been to effect, as far as practicable, a settlement of the claims which the vendor of the estates has for the residue of the purchase-money, after crediting the value of the shares appropriated to him; bearing in mind the important fact, that, by the terms of the purchase, he had a right to demand payment out of the capital stock to the extent of two-thirds of the deposits, and one-half of the amount of calls received from the proprietors.

The directors have the satisfaction of acquainting the proprietors that, notwithstanding the unexampled depression of the times in 1846 and 1847, and the postponement of any calls till the end of the year 1847, they have, nevertheless, been enabled to arrange terms for a settlement of the vendors claim on terms highly advantageous to the company; that is to say, by payment to him in cash of his full claims, in respect of the share of deposits, and by granting to him the company's bonds, payable in one, two, and three years, from May, 1848, for the proportion of calls to which he was entitled: the sum thus postponed amounts to 13,000*l.*—of which bonds to the extent of 8000*l.*, payable in 1851, have been delivered. In making these arrangements the directors have been met by the vendor in a spirit of liberality, which calls for a grateful acknowledgment on their part; and it is satisfactory to observe, that whilst the interests of the proprietary in the transaction have been secured, it affords a further proof of the confidence of the vendor in the ultimate success of the company. The effect of this arrangement may be shortly stated, thus—the company obtain a release from the vendor of all claims on account of his share of deposits or calls, after crediting the company with the amount of the shares appropriated to him, with the sums secured by the company's bonds as above stated, and the various other payments made on this account; as appear from the balance-sheet, there remains due to him on 30th June, 1848, a balance of 58,768*l.* 16s. 4d.; which balance is extinguishable, first, by crediting the amount of any future calls on the shares held by the vendor; and, secondly, by payments out of the future available profits of the company. The company, therefore, are now in the absolute possession, by indefeasible title, of their large mineral estates; and the balance of the purchase-money being no longer a charge on the capital, the funds to be created by any future calls will be at the free disposal of the company for general business purposes.

The directors cannot but record their own entire satisfaction with the arrangement thus made, which they trust will meet with the unqualified approval of the proprietors. It will be in the recollection of the proprietors that, according to the original proposition, 7000 shares only were to be appropriated to, and held by, the vendor. The directors, however, in the exercise of their discretion, and with a view to lighten the debt, consented to a proposition made to them by the vendor, offering to take 5000 additional shares, having 6*l.* paid up thereon, in further diminution of the purchase-money. But whilst the debt to the vendor was thus reduced by 30,000*l.*, it should be remembered, that the directors were thereby deprived of a considerable proportion of capital, which the sale of these shares would have produced. Again, it should be borne in mind, that it was originally proposed to call for 6*l.* per share during the first 12 months; but the directors were strongly and repeatedly urged to postpone the call of 4*l.* per share, beyond the deposit of 2*l.* from time to time; and certainly the extraordinary pressure of the times, during the years 1846 and 1847, seemed to justify such postponement. It was not until the close of the year 1847, that they made the additional call of 4*l.* per share; and, in this way, also, they have had their available resources narrowed, and their exertions disadvantageously crippled.

The directors have always felt the paramount importance of providing for railway transit to Swansea; and have for this purpose, as is known to the proprietors, obtained the requisite sanction of Parliament. The construction of this work must, they conceive, at no distant period, amply remunerate the company for the cost of procuring the special act, and other incidental charges for the line, and can hardly fail to become the high railroad to the docks and port of Swansea.

The shock given to credit, and the consequent difficulty of procuring money in 1847, were such, that, with the most arduous exertions on the part of the directors to secure the speedy payment of calls, it was not until six months from Oct., 1847, that a fair proportion of the amount was received. In the meantime, and during 1846, 1847, and 1848, the demands for royalty, payable to the landlord, and purchase-money and interest to the vendor of the estates, besides payments for permanent works and general business, required to be met; and the means at the command of the directors being insufficient to complete the construction of the railway, and to make these payments, without additional means, they considered it best to make the settlement already adverted to with the vendor; and, as explained in the report submitted to the shareholders in January last, and approved by them, to proceed in the first instance to take preliminary steps to construct a short line of rail, if practicable, to the port of Llanelly. It will be recollected, that this line was one of the original objects of the company; and considering the insufficiency of funds to construct their main line to Swansea, and the expectation of the South Wales line supplying railway transit at an early period, they deemed it advisable to secure a railway to the port of Llanelly at all events, until either, or both of the two main lines to Swansea should be constructed, and ready for traffic. A committee of the directors, accompanied by the secretary, visited the company's property in March last, and specially directed their attention to the construction of this line, and reported thereon, as well as on various other matters connected with the company's property and business. Their resident engineer proceeded, in March last, to lay out the line, being only 2¼ miles to join the present line which leads to the port and docks of Llanelly; and, since that time, the directors have taken the most energetic measures to procure the requisite consent from the various landowners and tenants, and to conclude terms of way-leave for the line; and, with the active and personal assistance of the manager and secretary, these consents have been obtained; and the directors are now arranging the final terms with some of the parties, which they expect shortly to conclude, and thus to save the expense and delay of applying to Parliament for an Act.

The construction of this line has commenced, and is now in progress; and the directors are assured by their manager that, if due exertion is used, and the work is carried on with full force, the same may be completed within three months from the present date.

Of course, when the line is opened, a very considerable reduction will be made in the expense of haulage, and the advantage of an additional port for shipment will also be obtained.

The directors also feel satisfied, that a reduction in the cost of production may be effected, and they have repeatedly and urgently laboured with their former and present manager, to accomplish this object, so as to reduce the costs to the original estimates, which the directors are persuaded can be fully carried out; and they are determined, even at the risk of a strike, to take the speediest measures to effect such a reduction in the cost of production, as well as the expense of haulage, as the rate of wages of the country and continuous working can possibly accomplish.

Simultaneously with the construction of the line, the directors have, as the proprietors have already been informed, proceeded with the extension of the colliery openings, which are now, under the skilful superintendance of their managing engineer, rapidly progressing, and partly completed, and will be finished, as reported by the manager, within a fortnight from this date; and, when these openings are made, they will give them the command of upwards of 60,000 tons a year, for a period of from three to four years to come.

With regard to the future operations at the colliery, the directors have to report, that Mr. Robert Daglish, consulting engineer of the company, has been applied to for advice and counsel. That gentleman has visited the estate, and carefully examined into its mineral properties and situation. He has also prepared a detailed survey of the whole estate, and has furnished the directors with a report and estimate, and recommends that a large winning should be made at a point fixed upon by him, which may take 18 months or two years in completing, and states that, when completed, and every point of the work can be brought into full action, the company will then have an efficient colliery, worthy of the name of being called one. The contemplated new winning will intersect the three present veins of coal, as well as another at a greater depth, if required—so that the extensive coal-field belonging to the company may be opened, and in full operation. Mr. Daglish, in his report, states—"It must also be taken into consideration the additional expenditure the company will have to be at in building a suitable house for the principal agent office, store-rooms, and workshops; also, at least from 25 to 30 cottages for sinkers and others, all of which are highly necessary to be done, before you can get the best and most efficient men to complete such an important and extensive undertaking—which cottages, when done with by the sinkers, will all be available as part of the colony, for the great number of working colliers it will be necessary to have, in order to get that extent of coal anticipated—that is, 1000 tons per day, and upwards, so as to make the colliery remunerate the company sufficiently for such an extensive adventure and outlay of capital." These views are also borne out by several reports from the company's resident engineer, who has had ample time and opportunity for examination, and by personal communication with Mr. Daglish, to acquire a thorough knowledge of the extent and value of the estates.

By an outlay of about 30,000*l.*, the directors are advised that the company will be able to carry out all that their engineers have reported and recommended, by which they can command, for a period of several years to come, an annual vend of upwards of 200,000 tons, and capable of being much increased. This sum would also provide means to construct the line to Llanelly, and the junction line with the South Wales line, so as to give the company the command of both the ports of Swansea and Llanelly. It is within the reach of the company to accomplish these great objects, and the directors confidently rely on the support of the proprietary for their accomplishment, being well convinced the result cannot fail to be highly profitable. It will be obvious, however, that these operations cannot be carried out without an augmentation of capital, which may be effected by various modes, as provided for in the Deed of Settlement:—1. By a call, or calls, to the extent of not more than 4*l.* per share, or such part thereof as may, from time to time, be necessary.—2. By the creation of new stock to a limited extent; and—3. By loans on bonds, debentures, mortgage, or otherwise secured on the company's property. By adopting the first mode, a twofold advantage will be effected; for, while the amount of the several calls, when made, will, according to the terms of the agreement for purchase, be immediately credited to the company on account of the balance of purchase-money due to the vendor, insomuch that the full amount of the 4*l.* calls will nearly extinguish the vendor's claims; the fund will, besides, yield a sum of capital wherewith to enable the directors to proceed with the large winning, and make all necessary additions to the working stock, the construction of the junction line to Llanelly, and the construction of the branch line to join the South Wales line, which leads to the port of Swansea; and the directors, therefore, propose, with the sanction of the proprietary, and in accordance with the Deed of Settlement, to adopt all, or either of these plans, as may seem most expedient (although the directors do not recommend the creation of new stock), and thus place the company in a strong position, and enable the directors to discharge the balance due to the vendor upon the bonds, to perfect the large opening, and the construction, of the line to Llanelly, with the additional branch line to unite the colliery with the South Wales Railway, when opened; and, lastly, to provide any further addition to the permanent working stock of the company.

The proprietors will observe, that the completion of these works are what were originally contemplated and proposed; and, when completed, the company will place their mineral estate in the position of being worked to an almost unlimited extent, as their consulting engineer reports, and the more extensive the workings, the cost per ton will be proportionally reduced, and the profits increased in the same ratio. Every exertion, under the ablest advice, has been made by the directors from the commencement of the company's business to the present day, for securing the real and substantial interests of the proprietors; and the directors are confident that their labours, which have been unceasing, have been attended with all the success which the unprecedented difficulties of the times, and the means at their command permitted; and all that is now asked, is the hearty co-operation of the large and wealthy body of shareholders, to enable the directors to complete the several arrangements which they have, in the exercise of an honest judgment, endeavoured to carry forward to the present period. Ten cottages have been completed, and the permanent works of the company are in good condition, and have been materially increased during the past year; and the directors will, when their railway is opened, be able to discontinue a portion of the horse haulage—so that a portion of the present buildings used as stables, may be converted into cottages (they believe 16 in number), for the use of the company's workmen, by which means a considerable outlay will be saved. The quay wall at the company's wharf, at Swansea, is in course of completion, although the work has been somewhat delayed from various causes.

The directors have purchased one ship during the last six months, and they have also chartered other vessels, in order to secure a continuous supply of shipping; if this plan does not, after a fair trial, succeed, the directors will immediately adopt other measures for that purpose. The coal cut and raised during the year ending 30th June last, is upwards of 19,496 tons. It still maintains its high character in the market. It has been successfully used in steaming across the Atlantic, and by various steam-vessels trading from the chief ports in the British Channel, Cornwall, and the south of Ireland. Orders have been received from New York, Cork, Belfast, Plymouth, Southampton, Dover, and other ports; and some additional expense has been incurred by having sample cargoes introduced into several of these ports, where a market for their coal is in course of being made. The directors are happy to state, that not a single bad debt has been contracted in the sale of the coal since the commencement of their business; and the most rigid economy has been observed in every part of the establishment, consistently with the efficient management of the company's business.

In conclusion, the directors have to observe, that the many labours and anxieties attending the establishment of a company like the present, have now, as they believe, been principally overcome; and it should be borne in mind that, while other companies of a larger extent and longer standing have fallen before the severe commercial pressure of the times, this company has maintained its ground. The property of the company fully comes up to all they have heard, and believe of it; its capabilities are great and manifold; its situation is excellent, and unsurpassed by any other of the like description; and, as already said, it only requires the united and energetic support of the proprietors, in which they will be fully met by their landlord, the vendor, and the directors, to make their mineral estate, for riches and for profit, second to none in the kingdom. The accounts for the year, ending 30th June, 1848, have been submitted to the auditors, who have, with much assiduity and care examined and approved of them, and a copy of the balance-sheet has been transmitted to every proprietor. In the outset of a company like the present, it was impossible to avoid a considerable outlay, of which the profit will be reaped by the proprietary in future years. The principle upon which the balance-sheet has been drawn up, is that which is usually adopted in large companies, and the general result enables the directors to state, that a dividend, at the rate of 5 per cent. per annum, may be paid on the paid-up capital of the company for the half-year, ending 30th of June last, free of income-tax.

E. G. Winthrop, Esq., Capt. A. H. Earle, and Henry Hart, Esq., three of the present directors, now retire by rotation; and, by the deed of settlement, are eligible for re-election, but that Mr. Winthrop has signified his intention to retire from the direction. A vacancy in the direction having also occurred, by the resignation of I. J. Rippon, Esq., the same has been supplied by the appointment of Mark Teversham, Esq., who now retires, but is also eligible for re-election.

Notice has been given by certain of the proprietors, that it is their intention to offer the following gentlemen—viz.: Messrs. Jacob Montefiore, John Barham, John Darnford, Warren Darnford, George Greenwood, Samuel Wood, Ebenezer Hunt, Charles Jones, Christopher Lund, Mark Teversham, and William Mandeno, as directors on the occasion of the present meeting.

The auditors, Messrs. W. W. Cooper and Thomas Strelby, also now retire, and are eligible for re-election.

An analysis and report from Mr. W. J. Hay, the practical chemist of the Government, at Portsmouth Dock Yard, dated the 27th July, was read; from which it appeared, that the coal raised by the company was peculiarly applicable to naval and marine purposes—having vitreous lustre, with compact colour; its density being such as to enable the stowage of 300 tons in the same bulk as 250 of the best Newcastle coal. It was found to kindle readily, yielding 90 to 95 per cent. The report proceeded to observe on the importance of the coal, as, not only to its cleanliness in steamers, but from the absence of smoke, being peculiarly adapted for warlike purposes, at the same time that it was of high evaporative power, and yielded 82 per cent. of coke.

Mr. C. BURLS, Jun., would have wished to move the adoption of the report, not being desirous, by any act of his, to deteriorate, in the slightest degree, the value to be attached to the property of the company. It was, however, for the directors to say what should be the colour and complexion of the meeting. He would then ask the chairman whether, there being four vacancies, the shareholders were at liberty to propose the election of three, in the room of three retiring—there being no objection on their part to the re-election of Mr. Hart, who fully possessed their confidence; and, in reply to a question as to the parties he would nominate, he begged to name Messrs. Christopher Lund, Ebenezer Hunt, and Warren Danford, the notices having been regularly given.

Mr. ELDERTON (the solicitor of the company) observed, that an objection arose to the notices referred to, inasmuch, with the exception of that signed by Mr. M. Feversham, it was stated therein that the meeting would be held at the London Tavern, for the election of directors—Mr. Cooper, as an equity barrister, and auditor of the company, having raised such objection.

Mr. BURLS, in reply, observed, that if an objection was raised by the legal officers of the company, it was only necessary, in such case, to convene a special general meeting for the removal and election of directors. He should deplore a multiplicity of meetings taking place, but if such was forced upon them there was no alternative.

Col. CAMERON considered that there was full power vested in a meeting of the proprietors, and, at the same time, that the directors could, at their next board meeting, elect such shareholders as might be then proposed; he, for one, was ready to give his hearty assistance in prosecuting the objects of the company.

Mr. COOPER observed, that the shareholders present might be bound by any Act, but that those absent would have grounds for complaint. That, in case of any action for suing third parties, the directors, if not duly elected, would not have the power to proceed, and, consequently, that a good defence would lie.

Mr. BURLS would not wish to raise any question as opposed to the legality of the measures to be adopted at the meeting, or the opinions expressed by legal gentlemen present, so far better able to canvass and determine the question at issue; but he trusted, with the view of saving the time of the meeting, that the solicitor of the company would suggest a mode, whereby the object they had in view would be achieved.

Mr. ELDERTON was fully aware that the question might be argued both ways; he wished to avoid embarrassment, to which they might be subjected, as also any liability which he apprehended would attend the proposed measure. He considered that, in the notices to which he had referred, the naming of the London Tavern, at which the meeting was to be held, might be deemed mere "surplusage," or it might, on the other hand, be fatal. He would not take upon himself to say, that the course proposed would be illegal; but he had no hesitation in saying, it would be highly questionable.

A lengthy and somewhat noisy discussion ensued on the point; when Mr. Howden, the secretary, was called upon to read the 59th clause of the Deed of Settlement, which rendered it imperative that three directors should go out of office annually, but who were eligible for re-election.

The CHAIRMAN observed, that certain observations had been bandied about, which would lead to an inference being drawn, that the proprietary did not place confidence in the board of directors; he would say, as chairman of the meeting, but rather in his capacity as a shareholder than that of director, that if doubt, or suspicion, existed, let a committee be appointed; he, for one, courted inquiry to the fullest extent, and would at once recommend a committee being instituted, with full powers to investigate into the affairs of the company. He, in common with his co-directors, was sorry that a difficulty had arisen, and which had not been foreseen, but that was not the fault of the directors. They were, as a board, acting as trustees for the body of proprietors; and it behoved them to adhere strictly to such course of action, as they might be recommended to do by the legal advisers of the company.

Mr. C. BURLS was of opinion, that the most prudent course, under all circumstances, would be to adjourn the meeting for one or two months, and, in the interim, to consider the reports and accounts submitted. He was ready to co-operate with the directors, having confidence in the value of the property, if properly managed; he would suggest the accounts and reports being received, and laid on the table—certain directors being appointed, to whom the same should be referred, and the adjournment of the meeting.

The CHAIRMAN regretted that a difference of opinion existed, and which had been manifested that day. He, for one, rather than create, or be the means of, any hindrance to the parties carrying out their views, would retire at once; and he was satisfied his brother, who was in the direction, was willing to pursue the same course.

Sir ANDREW GREEN wished it to be clearly understood that, as a shareholder, he had done his best in filling the office of director; with the appointment to which he had been honoured, he had endeavoured to serve the proprietary, and, at the same time, to protect his own interests. He was ready to retire from office on the appointment of any gentleman of business habits, and who would direct his attention to the interests of the proprietary.

Colonel CAMERON considered it would be best, that his sons should retire from the direction. (This was received with dissent on the part of the meeting, as were also the offers on the part of the chairman and Sir Andrew Green—the proprietors being unanimous in desiring that they should retain office, having every confidence in them.) Col. Cameron continued, by stating that he was there, ready to answer any question which might be put; he would not shrink from the most searching inquiry; scurrilous and abusive language had been used on an occasion elsewhere, when he was not present, and everything had been done to detract from his character. He stood there fearless, and ready to stand any test; and with reference to the remarks made by Mr. Taylor, the former manager, and who had to do with the concoction of the company, he only regretted that he was not present. He would, however, appeal to Mr. Howden, the secretary, as to whether that gentleman was not incapable and unfit to carry out any contract which he might enter into—which assertion was at once confirmed by Mr. Howden, the secretary. He (Colonel Cameron) would now say a word, as to the value of the important property possessed by the company; true it was, that the dead royalty, or rent, was 2000*l.* a year, or 1s. a ton on 40,000 tons, the quantity estimated to be raised—the royalty upon all excess being after the rate of 1s. per ton, while a grant had been made, that the 40,000 tons should average over a given period of seven years, while the capabilities of the colliery was such as to produce 120,000 tons. He had good grounds for complaining of Mr. Taylor's management; he was satisfied that all which Mr. Taylor had professed himself capable of doing might be readily effected by care and proper attention—but such had not been done, and hence the opposition he had met with. The fact was, the company had not worked the colliery efficiently. It was so late back as July, 1846, that he had had a letter from Mr. Taylor, stating that coal could be raised, and laid down at Swansea, including royalty at 5s. 7d. per ton. Such, doubtless, could have been done, and, indeed, had been accomplished by his (Col. Cameron's) son. The gallant colonel proceeded to enter into detailed calculations of cost of cutting, haulage, &c., to establish the point raised—[Mr. SMALLBONE here observed, that the cost of coal was 7s. 2d., instead of 5s. 7d.]—and further observed, that in case the working of the colliery was left to his sons, in conjunction with himself, he would guarantee that the coal would be raised and delivered for the price stated. It must, of course, be apparent to the meeting that much, if not all, depended on the extent of their workings; there was an ample demand, and it only required extension of the works to yield an equal supply—for it must be apparent that, with a dead rent, or royalty, expense, management at the colliery, at the wharf, and in London, it made all the difference as to whether the company raised 5000 tons or 50,000 tons in the year, as such necessarily affected, in a proportionate ratio, the charge which was necessarily attendant, whether much or little was done; and hence he would strongly recommend the more active and full development of the several seams at their command, and by increasing their produce, and, consequently, sales, reduce the cost to which the plant was subjected. He did not wish to intrude on the meeting, but he felt it due to himself to place before the proprietors not only their position, but his own. As the vendor of the property, he was entitled to certain interests and advantages arising out of the calls made upon the shares, but he had forgone these. He had readily taken up 5000 additional shares, with 6*l.* assumed to have been paid thereon, or 30,000*l.*, in further part payment of the purchase-money. He had never sold a share, and yet, by this Act, being entitled to 4 per cent. on the purchase-money unpaid, he had actually given up 1200*l.* a year.

Mr. SMALLBONE observed, that it was clear there had been a loss during the past 12 months of 2s. 2d. per ton, and yet dividends had been declared. He believed the property to be highly valuable, and that profits might be realised; but system and management were required.

A lengthened discussion—which we have neither space to give, nor would it be of general interest—ensued; the substance being comprised in a few words, although the time occupied extended beyond five hours. The important question was, the re-election of the directors who retired, or the appointment of others in their stead—it being admitted that the latter course was open to objection. It was in the end agreed, that the directors retiring or vacating their offices should be re-elected—it being understood that two vacancies would arise from the retirement of two of the proprietors so re-elected, which should be filled from the list of candidates proposed on the part of the shareholders, which ended in the re-election of Capt. Earle, Messrs. Hart, Teversham, and Winthrop, and the nomination of a committee, consisting of Messrs. E. Hunt, T. Green, Charles Burls, J. Danford, J. Smallbone, and R. Bennett—Messrs. Strelley and Burls being appointed as auditors.

Mr. ELDERTON was anxious to draw the attention of the meeting to the importance of the proceedings of the day, which involved beyond the questions which had come before them, and wherein a diversity of feeling evidently existed, that of the necessity of considering the object of the extraordinary, or special, general meeting, which would follow the present—the object of which was, that of determining on the course to be pursued for carrying on the operations of the company, and on which its vitality might be said to depend. It would be found essentially necessary to take some measures for raising the necessary means for meeting the claims on the company. The construction of the railway and winning the colliery to an extent, so as to yield 100,000 to 150,000 tons a year. To effect this, it was not only desirable, but, he might say, indispensable, that a call should be made, which might cover three years, during which time the Llanelly line would be constructed, and also the great winning of the centre coal-field, which latter was estimated at 21,500*l.* He had these figures on the authority, or data, of Messrs. Daglish and Atkinson. In thus making a call of 4*l.* per share, which would be necessary, 48,000*l.* would be chargeable on the shares held by the vendor, and thus reduce its claim in money, and save the interest which was accumulating on the debt. This alone would be of moment; but he had no hesitation in saying that, if he did not impress on the proprietary the absolute necessity of making such call, or at least authorising the directors to do so in such manner, and at such times, as they might deem fit, the concern would be seriously injured, and, indeed, he would not answer for the consequences—being well conversant with the nature of its affairs; while, on the other hand, if the call was made, or rather a power vested in the directors, it was very possible that some negotiations, now on the carpet for the vendor, for the payment of the balance due him, might be carried out advantageously; but which, he must repeat, would alone depend on the shareholders themselves. With the call, or right of making it, all might be effected—without it, nothing.

Mr. BURLS was ready to place confidence in the last speaker, and would cheerfully pay his proportion, but contended that a change was eventually necessary. Profits had been declared, and dividends made, while losses had been sustained; that was apparent; for, in the accounts sent out, gross profits were put forward which never existed.

Mr. HART, one of the directors, and chairman of the finance committee, having been called upon to offer some remarks on the financial affairs of the company, observed, that he was anxious to remove any false impression. If power was given to the directors to make a call, such would not be made without the same was found essentially necessary; and his impression was, from the nature of a negociation then in progress with the vendor, that such would not be required, or at least for 12 months, and then, perchance, 25 per cent. only. As regards the remarks made as to the absence of profits, he considered that the preliminary expenses, and even the annual expenditure, so far as affected the plant and machinery, of management of the property, should be placed to a separate account, and paid off rateably from a sinking fund. It was observed, *en passant*, by a proprietor, that the cost of raising coal, during the past 12 months, was 16,106*l.*; while the entire receipts amounted only to 7177*l.* 10s. It was not, however, stated whether the amount of stock in hand—4676*l.* 19s. 1d.—was taken into consideration.

A general discussion ensued, which was protracted until a late hour; but nothing of importance was elicited beyond the several points embodied in our report, the proceedings terminating in the re-election of directors, the appointment of a committee, and also auditors, as before observed; and an understanding, that at the extraordinary general meeting, the call of 4*l.* per share should be assented to, it being understood that no one call, or instalment, should exceed 20s. per share, or at less intervals than six months.—Thanks to the chairman having been voted, the meeting separated.—The resolutions passed will appear in our columns of next week.

EAST TAMAR CONSOLS MINING COMPANY.

The first two-monthly general meeting of shareholders was held at the office, Threadneedle-street, on Monday, the 24th inst.—The minutes of the last meeting having been read and approved, the financial statements were submitted, examined, and adopted, and the manager's report read.

The CHAIRMAN briefly congratulated the shareholders on the present position and prospects of the company, and energetically stated that, notwithstanding the obstacles and expenses, consequent on the recommencement of the operations, he was pleased to find that a profit had been made during the two months. He (the chairman) referred to the communications of their zealous and indefatigable superintendent, which represented a highly important discovery in the 25 fm. level, north of Smith's shaft; and he expressed his firm belief, that the mine would become a rich and standing one.

Abstract of Accounts for May and June.

May 24—Paid April cost	£185	16	5	May 24—Sale of 20 tons of silver-lead	£225	10	0
June 27—Ditto May ditto	328	4	0	June 30—Ditto, 30*t.* 2*c.* 1*q.*	334	18	9
July 24—Balance	52	0	4	Ditto, fluor-spar	5	12	0
Total	£566	0	9	Total	£566	0	9

The following report, from the manager, was read to the meeting:—

July 22.—During the past two months ground has been cut, and the shaft sunk 4 fms. 2 ft. under the 60 fm. level; the lode, on an average, is about 3 ft. wide, and composed of fluor and flour-spar, with good veins and branches of lead occasionally; the 60 fm. level north has been extended 9 fms. 3 ft. 3 in. on the course of the lode; the average produce is about 6 cwts. of lead per fm., and the price for driving 50s. per fm.; at present the lode is rather disordered by a slide, which is just passing through it; we had a good lode previously, and expect to have the same when clear of the slide; the present end is 26 fms. 4 ft. 9 in. from the shaft, and in whole ground to the 46 fm. level; the 60 fm. level south has been extended 11 fms. 4 ft. 6 in. on the course of the lode; the average produce is about 6 cwts. of lead per fm., and the price for driving 50s. per fm.; at present the lode is 3 ft. 6 in. wide—easy for driving, letting down much water, very promising in appearance, and producing about 8 cwts. of lead per fm.; the end is 27 fms. 1 ft. 7 in. from the shaft, and in whole ground to the 46 fm. level. The 46 fm. level has been extended about 8 fms. 2 ft. on the course of the lode; the average produce is 10 cwts. of lead per fm., and the price is 80s. per fm.; a very good lode in the present end, which is 44 fms. 2 ft. from shaft; the 46 fm. level south has been extended 4 fms. 5 ft.; the lode generally is small and poor; at present it is 18 in. wide, with some good stones of ore, and presenting indications of improvement—present price 5*l.* per fm., but may be reduced to 80s. next setting, or, perhaps, less. In the stopes, in the back of the 60 fm. level north, the lode is 3 ft. wide, and yielding 6 cwts. of lead per fm., price 15s. per fm. for stoping; in the rise, in the back of the 60 fm. level south, the lode is 2 ft. wide, yielding 5 cwts. of lead per fm., price 12s. per fm. In the back of the 46 north, in the stopes, the lode is 3 ft. wide, yielding about 7 cwts. of lead per fm., and improving northward. In the back of the 25 fm. level, north from Smith's shaft, the lode is 3 ft. wide, and yielding at least 15 cwts. of rich ore per fm.; we have but recently commenced stoping this back, and are pleased to find it so productive, and that there is every probability of its continuing to be so. We have two pitches in the back of the 54 south, working at 9s. and 11s. in 1*l.*; one in the same level north at 9s.; one in the back of the 46 north at 11s.; and one in the back of the 38 south at 11s.—in all the men are likely to get wages. Since the 23d May, the surface operations may be briefly stated. The whim-engine has been completed, and is now in full and very efficient working, at a cost of 6 cwts. of coals per diem. The dressing floors have been taken up, raised 2 ft., and re-laid. The returns for May, computed at 30 tons, weighed as advised. June ores are dressed and in the ore house, computed at 30 tons. From the quantity and quality of the work broken, and now dressing, I fully expect we shall have more than 60 tons for our next sampling. We have opened much more ground than we have taken away, and the mine generally is in an improving state. The following letter was written subsequently to the above:—The lode in the backs of the 25 fm. level, south of Smith's shaft, will, in all probability, be very productive; I examined it very minutely yesterday, and

had a barrowful of the work brought to surface, and dressed as well as such a small quantity could be; the sample was tried to-day, and the produce is 14¾ for lead, and 26¼ ozs. for silver; in quantity I think it would produce 14¾ for lead, and 30 ozs. for silver. I believe this ground will be very productive all the way to Gourd's shaft; it is about 90 fms. in length, with 25 fms. back. This evening the men report, that the lode is better than when I saw it yesterday. The lode in the south end, in the 60 fm. level, is the most promising I have yet seen in the mine.

ENGLISH COPPER MINERS' COMPANY.

An adjourned meeting of the debenture-holders was held on Thursday, the 27th inst., at the British Hotel, Cockspur-street, for the purpose of determining on the course to be pursued, and, further, for the appointment of a committee. The meeting was held to be distinctly private, and not as a public meeting, under the provisions of the Act by which the company is governed, or deed of settlement. Under such circumstances, we merely give an outline of the proceedings—in doing which, we feel that we promote the objects of the meeting, and, at the same time, in no way militate against the interests of the company. From the same reason we abstain from giving the names of the parties who took the most prominent interest in the proceedings of the day, contenting ourselves with the sum and substance thereof, as the shareholders will doubtless, by circulars, be made acquainted with the main features and the intentions of the committee appointed.

From the statements submitted by the chairman, it appeared that a course of deception had been practised, or that there was gross ignorance on the part of the directors, inasmuch that, 18 months since, when a dividend was declared, the question had been put distinctly to Mr. A. L. Gower, the chairman, whether such was derived from profits, or otherwise, when that gentleman, as chairman of the company, did not hesitate to say such was the case—at the same time that the company were 170,000*l.* in debt at that moment, but which was denied by Mr. A. L. Gower, the chairman, on the occasion. The amount of debentures was no less than 360,000*l.*; and it was an important feature, and highly deserving of notice, to state that, while the debenture-holders, or those of preference shares, had paid, in one way or other, 100*l.* per share, the interest thereon having been paid until a late period, debenture shares had actually been issued at 13*l.* per share, on which a bonus of 10*l.* per share had been given, so that the real money paid was only 3*l.* per share. Mr. Mowatt had made a handsome profit by a move of this nature—he (the chairman) believed 15,000*l.*; and that gentleman's brother-in-law, who had disposed of 100 shares, had pocketed 1000*l.* It was quite clear, from the representations made, as to the property, that, after paying the Bank their advance, they would be minus 70,000*l.* He submitted that a committee should be appointed, and a subscription entered into, with the view to protect the interests of the debenture-holders In the end, a committee was formed, of six debenture-holders, including the chairman, Sir G. Cockburn, and other influential holders, and the sum of 250*l.* determined upon as the amount of subscription to carry out, by legal advice and measures, the objects of the meeting. The committee subsequently met, and appointed a solicitor, and have put themselves in communication with the debenture-holders at large.

GREAT ROUGH TOR CONSOLS MINING COMPANY.

A meeting of shareholders was held at the offices, Threadneedle-street, on Saturday last.—The mine's cost-sheet for the month of May, amounting to 235*l.* 5s. 5d., and that for the month of June, amounting to 236*l.* 9s. 11d., and the purser's cash account, showing a balance in favour of the adventurers of 217*l.* 9s. 1d., were examined, and passed. The purser reported that the liabilities to be discharged before the next meeting amounted to about 866*l.* 9s. 11d., being the cost for the month of June, and the estimated cost for the months of July and Aug.—It was resolved, that a call of 25s. per share, payable on or before the 17th Aug. next, be now made.—The purser reported that all calls had been paid up by the shareholders.—A letter was read from the defaulter, whose 15 shares were declared forfeited at the meeting held the 25th of May last, stating that he was prepared to pay all the calls due upon the said forfeited shares—whereupon it was resolved, that the letter from the defaulter of the 15 forfeited shares in question, cannot be entertained by this meeting, as, by so doing, it would be incompatible with the 19th rule of this adventure, by virtue of which the said shares were declared absolutely forfeited.—It was resolved, that the 15 shares declared forfeited on the 25th May last be offered for sale, in conformity with the 21st rule of this adventure, provided a price can be obtained of not less than 12*l.* 5s. per share; and that the shareholders be invited to send in sealed tenders for the same, addressed to the purser, and endorsed "tender for shares," previously to the meeting to be held on Monday, the 11th of Sept. next.—The following report from Capt. Joel Hitchens was read:—

July 17.—Since my last communication, nothing of a very interesting nature has been developed in these mines. In fact, from the nature of our present operations (merely sinking two shafts in the country), very little, if any thing, of importance can be expected, previous to our reaching the object we first started for. This, I am happy to say, is about to be accomplished shortly, at one of the points of this great and very interesting experiment. Morris's shaft has now reached the depth of 30 fms. below the adit level, or about 40 fms. from the surface, the point decided on for driving off the first cross-cut to the lode. All preparations have been made to expedite this work as much as possible; the driving the engine from the whim-shaft, fixing ladders for footway, and sundry other necessary work, have been completed, and we have this day commenced the cross-cut. The distance to drive it, according to the underlie of the lode, as seen at the surface, is about 13 fms.; which, from the present very favourable nature of the ground, I think will not occupy us beyond two months; but I wish you to understand, that this calculation cannot by any means be depended on, as the lode in gaining depth may considerably alter its angle of declination, and, consequently, make the distance to drive more or less than the calculation. This shaft, in the last 7 fms. sinking, has passed through a beautiful strata of killas, possessing every characteristic congenial to the production of copper ore; and, in that distance, several small branches have been intersected and passed through, producing some good stones of ore, and otherwise presenting a highly mineralised character. These are, no doubt, upshoots from the main lode, or "droppers," to it, and, therefore, presenting very interesting and satisfactory indications.—In Thomas's shaft we have about 5½ fms. more to sink to reach the same level we are driving at Morris's—this, probably, will take about three months, from this time, to complete. In this place we have had a great deal of water to contend with, which has considerably impeded our progress in sinking. The ground passed through is of a tolerably favourable nature, such as may be considered promising good results on cutting the lode. In this shaft, also, we have passed through several small branches and floors of quartz, all being more or less impregnated with mineral, and producing good spots of copper ore. Our engine, and the machinery attached to her, is in excellent condition, and has continued to work from the commencement with perfect satisfaction. Herewith I beg to hand you the cost-sheet for June, together with several vouchers for payments to merchants—the whole of which, I hope, you will find correct.

Since the meeting, the following letter has been received from Capt. Hitchens:

July 25.—As I anticipated, we have found a course of granite, by costeaning, between the main lode and Morris's shaft; and I have now very little doubt of the lode being found, in depth, entirely in granite; the ground we are driving through, in the cross-cut, is of a very favourable nature, intersected with numerous orey branches, and easy for driving, and the price is only 50s. per fm. We have six men employed here; the other three I have put to assist in sinking Thomas's shaft. According to the present state of the ground in the cross-cut, we can drive about 10 fms. per month.

HOLYFORD MINING COMPANY.

At the general half-yearly meeting of shareholders, held, pursuant to advertisement, at the office, on the 26th inst.,—E. Hunt, Esq., in the chair,—after the usual preliminaries, the report of the directors was read:—

REPORT.

The directors beg to submit to the shareholders the following balance-sheet, and statement of expenses and produce of the mines, made up to the usual periods.

Balance-sheet, from 30th November, 1847, to 31st May, 1848.

To cash in hand, per last account	£1827	2 9
Net proceeds of ore raised from July, 1847, to February, 1848, inclusive, less royalties	9042	10 9
Total	£10,869	13 6
By salaries, 50*l.*; office rent, 25*l.*	£ 75	0 0
Assays, registration fees, advertisements, and petties	6	15 8
Mining Journals and *Times* papers	4	11 0
F. Syrett's account for books, stationery, &c.	17	14 6
Subscription to Cappawhite Dispensary	5	0 0
Current expenses in working mines to 30th April	4224	6 11
Cost of engine, and expenses erecting, to 30th April	1613	7 3
Dividend paid on 1000 shares, at 2*l.* per share (7th March)	2000	0 0
Dividend paid on 1000 shares, at 1*l.* per share (10th May)	1000	0 0
Income-tax paid to foreign shareholders	12	17 3
Cash in hand at the mines	205	10 7
Ditto at bankers, and bill due 23d June	1704	10 4
Total	£10,869	13 6

[The statement of monthly mine costs and produce was then read.]

It will be seen, that the current expenses, as well as those attending the erection of the steam-engine, have been, as anticipated by the last half-yearly report, very heavy—the greater portion of them have, however, now been paid; and this outlay will, it is hoped, be fully compensated, within a short period, by the regularity and greater progress of the workings—the extent of ground lately opened having, in part owing to failure of water-power, been small. The quantity of ore raised has also been less than before; while its value, in common with that of all other copper ores, has been very much reduced—the depreciation, at present rates, as compared with those of 1847, amounting to 30 per cent. Your directors have, however, entered into arrangements which will, they expect, enable them to avoid the sacrifice of property attendant on the sale of their ores at the ticketings; and although, under existing circumstances, they cannot hold out much hope of a dividend during the next six months, they recommend that they be authorised to declare one, should any improvement render it advisable. For the half-yearly progress of the workings, and present prospects of the mine, they refer to the following reports, drawn up by Capt. Lyle, which, under the circumstances above adverted to, they consider as satisfactory as could be expected:—

Holyford Mines, July 19.—I herewith hand you report of these mines for the last six months.—*Old Forge:* We have completed the 28-ft. wheel, and cleared the old bottom, where we found the lode to be 3 ft. wide, spangled with ore, and the ground hard. The lode in the old bottom, and in the adit level, is underlying west, and we expected it would have been altogether in the shaft before this. The shaft is now down under the old workings about 3 fms.; the ground continues very hard, with branches of the lode spotted with ore; but the main part of the lode is still standing to the east, which we shall cut into as soon as we get down to a 10 fm. level. We are now sinking a shaft on the eastern hill from the surface, to come down on the adit end. The lode in the shaft has a very promising look; it is composed of gossan and spar, with some greens. This shaft is down about 9 fms. from surface, and we expect in about a month to hole to the adit level.—*Ballacoun:* We have sunk the winze under the adit level about 7 ft.; the lode in the bottom is about 6 in. wide, and poor; the ground is hard, but there are some spots of ore in it. The water is so much increased in the bottoms, that we are obliged to suspend operations in this part.—*Holyford:* We have completed the 40-inch steam-engine, and the necessary erections, with the exception of slating the boiler-house, which will be finished in a few days. The engine-shaft is now down to a 10 fm. level. The lode in the bottom of the shaft is about 18 in. wide, with good stones of ore—a promising appearance—and, I hope, will soon make a good course of ore. We have driven the 10 fm. level north 8 fms. 2 ft., the lode varying from about 1 ft. wide to 3 in.; in some places we have had good stones of ore. The 10 fm. level south is driven 7 fms. 1 ft., the lode varying from 18 to 6 in. wide, and, in different places, producing very fine stones of rich ore. The adit level has been driven 16 fms.; the lode has, in different places, made very rich bunches of ore, for about 1 ft. wide in the bottom of the level, which we expect will improve as it goes down; the end at present is poor, and the lode small. We are sinking a winze in the bottom of the adit level, 17 fms. north of the engine-shaft; the lode in the winze is about 2 ft. wide, with a solid branch of ore 6 in. wide, and good stones of ore throughout the remaining part. The lode in the winze sinking between the second and third shaft, is about 6 in. wide, with a very good branch of ore, and looks well—the ground more favourable than it has been for some time. The 22 fm. level has been driven 4 fms. 2 ft. 6 in.; the lode is from 1 ft. to 6 in. wide, with a good branch of ore; a winze has been sunk on this ore 3 fms. 3 ft.; at present the lode is small and poor. The 17 fm. level south has been driven 9 fms. 4 ft. 1 in.—lode small and poor; the same level north has been driven 7 fms. 1 ft.—lode varying from 1 ft. to 6 in., a great part of the distance producing good stones of ore. The first shaft is communicated to the 17 fm. level. We are sinking a winze under the adit level, on the bunch of ore between the first and second shafts; it is now down about 4 fms.—lode about 18 in. wide, and will produce about 4 tons of ore per fm., that will make about 26 per cent. of copper. You will see, by the report, that the ends at present are poor; but, from the ore going down under the adit level, I hope, after driving the 10 fm. level a few fms. further, we shall be able to give a more favourable account.

July 22.—Since my report on Wednesday, I am happy to inform you, that we have cut in the 10 fm. level north, a good branch of ore; when first cut, it was about 4 in. wide, it is now increased to 6 in. solid, and, from its appearance, it is likely to be much larger in a short time. I have no doubt but it is the continuation of the ore which we have driven through to the north of the third shaft, in the adit level; and, from appearances, is likely to improve as it goes down. I have one pitch to advise this week in the bottom of the adit, between the second and third shaft, taken at 20s. per ton, by six men; it will now produce about 4 tons per fm.

It was resolved—That the report of the directors be approved and confirmed, and a copy sent to each shareholder; and that the directors be authorised to declare, during the ensuing half-year, such dividends (if any) as they shall think fit.

TRENANCE MINES COMPANY.

The second annual general meeting of shareholders was held at the office, Cornhill, on Friday, the 28th inst.

George Burnand, Esq, in the chair.

The meeting was attended by the holders of a large majority of the shares which the company is composed.

The notice calling the meeting having been read, the Secretary proceeded to read the report of the directors as follows, with the accounts, of which we present an abstract.

DIRECTORS' REPORT.

Your directors have assembled you to receive their report for the last half-year, and the accounts to end of May last—which latter exhibit an expenditure of 1104*l.* 14s. 2d., or a monthly average of 184*l.* 2s. 4d.; the receipts from the mines being 166*l.* It must be borne in mind, that little more than 12 months have elapsed since the lode was first discovered; and, remembering such discovery was made in virgin ground, it will readily suggest itself to reasonable minds that much could not be produced in so short a time; during which, however, it is pleasing to state, that the mines have been developed, both in length and depth, to a very great extent, notwithstanding the difficulties occasioned by the perpetual influx of water; and your directors have here to request your serious consideration of a subject very properly brought before our notice in the purser's report, which will shortly be read to you—viz.: the erection of an engine, which would enable us to pursue the lode below the adit, and also to work above it, at one-half the present expense. The directors have to acknowledge the receipt of payment of 3d call on 1860 shares. As notified in the circular, George Burnand, Esq., retires from the direction by rotation; but, being eligible, offers himself for re-election. Mr. B. E. Lindo and Mr. W. F. Street, auditors, also go out of office at this meeting.

The statement of accounts showed—Balance of last account, 961*l.* 0s. 8d.; third call of 1*l.* (less 190*l.* unpaid), 1810*l.*; malleable copper sold, 41*l.* 3s.; copper ore, 124*l.* 17s.=2937*l.* 8s.—By mine cost for December to May inclusive, 1104*l.* 14s. 2d.: leaving a balance of 1832*l.* 6s. 6d.

The Chairman begged to direct the attention of the meeting to a full and detailed report, which had been drawn up by Mr. Dalton, the purser of the mine, who was then present, and would be happy to answer any inquiries, or render such information as was in his power. It was highly gratifying to find that the expectations held out, at an antecedent period, had, in a great measure, been realised; and the ore, or rather metallic copper, lately raised, afforded the strongest evidence of the value of the property, and held out every inducement for them to prosecute their operations with vigour.

The report of Mr. Dalton was then read, which was of a cheering nature; it went into detail as to the nature of the operations, and the necessity, as well as importance, of erecting a steam-engine, so as to prove the mine at a greater depth. The present shaft, or winze, was sunk about 20 fms.; and the adit level at that point was nearly intersecting it, and which indeed might be expected daily. The report, which possesses much interest, from the peculiar nature of the ground (serpentine), forming a junction with the killas, and producing such large slabs, or runs, of native copper, we propose giving in our next—want of space, and the late period of the meeting being held, precluding further notice this week. It appeared, from the accounts, that there was a balance in hand exceeding 1900*l.*; and authority having been given to Mr. Dalton to take measures for the purchase of an engine, and the requisite machinery for putting the mine down to a greater depth, and the re-election of directors and auditors having taken place (for which see advertisement), a vote of thanks was passed to the chairman and directors, when the meeting separated.

TREVISKEY AND BARRIER MINING COMPANY.

The two-monthly meeting of adventurers was held on the 17th inst., when the statement of accounts was produced, showing—

Treviskey.—By ore sold 30th March (less dues), 1284*l.* 1s. 4d.; for materials, 3*l.* 17s. 7d.=1280*l.* 3s. 11d.—To labour cost, 537*l.* 19s. 2d.; tribute of ore, 173*l.* 16s. 11d.; merchants' bills, &c., 168*l.* 13s.; Tresavean adventurers' engine cost, 98*l.* 7s.=978*l.* 16s. 1d.—leaving in favour of shareholders the sum of 310*l.* 16s. 3d.; by dividend of 50s. per share, declared 17th July, 300*l.*—leaves balance in hand, 10*l.* 16s. 3d.—The following report was presented:—

In Michael's shaft, which is now sunk to within 3 ft. of the 260 fm. level, the lode is 20 in. wide, and worth 10*l.* per fathom. In the 248 fm. level, east of the above-named shaft, the lode is 3 ft. wide, and worth 15*l.* per fm. In the 236 fm. level, east of Michael's shaft, the lode is worth 30*l.* per fm. The lode in the 188 fm. level is small, and poor. The lode in the 30 fm. level, driving west of Williams's old sump-shaft, on the north lode, is 18 in. wide, and producing stones of ore. We have commenced sinking Williams's old sump-shaft, below the 30 fm. level, by six men, at 9*l.* per fathom. On Wednesday last we sampled 316 tons of ore, and expect to raise 300 tons for July and August.

Barrier.—By ore sold 30th March (less dues), 112*l.* 9s. 2d.—To labour cost 66*l.* 4s. 2d.; tribute of ore, 24*l.* 12s.; merchants' bills, &c., 7*l.* 4s. 4d.; Tresavean adventurers' engine cost, 19*l.* 16s. 10d.—showing loss of 5*l.* 8s. 2d., which, deducted from balance over end of March, leaves now in hand, 53*l.* 17s. 5d.—The following report was presented:—

In the winze sinking in the 248 fm. level, the lode is 2 ft. wide, producing stones of ore. On Wednesday we sampled 89 tons of ore from the pitches and stamps, and expect to raise from the pitches and winze about 40 tons, for July and August.

WEST WHEAL PROVIDENCE MINING COMPANY.

At the meeting of adventurers, held at the mine, on the 19th inst., the accounts were presented, showing—Mine cost for March, April, and May, 396*l.* 8s.; merchants' bills, 77*l.* 15s. 4d.=474*l.* 3s. 4d.—Balance from end of February, 2*l.* 2s. 8d.; sale of tin, 662*l.* 13s. 6d.; copper, 66*l.* 3s. 4d.; arsenic, 45*l.* 10s.; less 1-18th dues, 43*l.* 0s. 5d.=733*l.* 9s. 1d.—leaving balance in favour of the mine of 259*l.* 5s. 9d.—A dividend of 20s. per share was declared.

The following report, from Capt. R. Polglam, was read to the meeting:—

West Wheal Providence, July 14.—During the past three months we have driven the 40 fm. level west 11 fms., through tribute ground; but the end, at present, is poor, which induced me to cross-cut the ground; and, in doing so, have cut two promising lodes—one north, and the other south, of this level; we have opened on the south lode 15 fms., that will set for about 6s. 8d. in 1*l.*, and have now commenced opening on the north lode; these lodes are all in whole to the surface. We have seven pitches working in the back of this level—one at 6s. 8d., three at 10s., and three at 12s., in 1*l.*—and can set one more at 6s. 8d. In the 35 fm. level we have driven a cross-cut south and cut the lode, and holed a winze to the 40 fm. level, through good tin ground, which is all we have done on this lode, in this level; there are three pitches working in the back, at 12s. in 1*l.* The flookan is cut in Wheal Tremayne, which has drained 15 fms. of ground under our 40 fm. level, and will enable us to sink Michell's shaft immediately. I am glad to tell you, that our prospects were never so good before. I believe I may say, with propriety, that, after opening some of this ground, we can raise, at least, 10 tons of tin per month.

WHEAL BLENCOWE MINING COMPANY.

A general meeting of shareholders was held at the mine, on Tuesday, the 18th inst.—W. Pease, Esq., in the chair—when the statement of accounts was presented, showing—To balance due to purser, 21st March, 181*l.* 10s.; cost for March, April, and May, 326*l.* 19s. 6d.; merchants' and other bills, 47*l.* 5s. 8d.=555*l.* 15s. 2d.—By tin sold, May 3, less dues and carriage, 78*l.* 2s. 10d.; ditto, 21st June, 118*l.* 1s. 9d.; arrears of calls received, 53*l.* 19s. 7d.; received on account of call made 21st March, 154*l.* 10s.—leaving balance due to purser, 151*l.* 1s.—The accounts were passed, and a call of 12s. 6d. per share made, to pay off the liabilities. The following report, from Capt. J. Dale, was read:—

The 30 fm. level has now been driven a distance of 30 fathoms, the present end being within about 12 fms. of the east and west lode, which, in my last report, I stated as having been cut in the 15 fm. level. This lode we have now driven on in the 15 fm. level about 20 fms. in length, and it has, throughout the whole distance, been very regular, and has fully maintained the character which we anticipated from the appearance it presented at the time of the last meeting; its size varies from 18 inches to 3 feet; we are now engaged in sinking a winze on its course, and it is extremely gratifying in being able to report that the lode has improved as the depth increased. The winze is now 3 fathoms deep, and that portion of the lode passed through is worth 20*l.* per fm. Within the last few days, we have cut an excellent bunch of tin on the old lode, north of the cross-course, from which very rich work has been brought to the surface: but as to its extent or value I cannot, from what I have yet seen, give an opinion. The adventurers now at the meeting will have heard, from other persons, who have this day been underground, that our prospects were never before so cheering.

WHEAL TREHANE MINING COMPANY.

At a general meeting of adventurers, held at the mine, on Thursday, the 20th inst., the accounts for March and April were produced, showing—Labour cost and materials, 790*l.* 18s. 3d.; dues on ore sold, 73*l.* 3s. 9d.; by dividend declared 25th May, 384*l.*=1248*l.* 2s.—By balance of last account, 554*l.* 17s.; lead ores sold 23d May, 1131*l.* 9s. 7d.=1686*l.* 6s. 7d.—leaving balance in favour of adventurers, 438*l.* 4s. 7d.—The accounts were passed, and a dividend of 20s. per share declared.—The following report, from Capt. S. Richards, was read:—

Wheal Trehane Mine, July 20.—The lode in the 55 fm. level, driving south of the cross-cut, is 3½ ft. wide, chiefly can and lead—producing about three-quarters of a ton of lead per fathom, and ground favourable for driving. We yesterday commenced driving north also from the cross-cut, in this level, where the lode is as last reported on—worth full three-quarters of a ton of lead per fathom. In the 45 fm. level north, the lode is 2½ ft. wide, composed of can, carbonate of iron, spar, and lead—producing 10 cwts. of lead per fathom. There is no alteration of importance in the stopes in the back of this level. In the stopes, south of this level, towards Phillips's shaft, the lode is turning out tolerably well. The lode in the winze, near the boundary, now sinking below the 45 fm. level, is worth about 8 cwts. of lead per fathom. The lode in the stopes, in the bottom of the 30 fm. level north, is yielding 7 cwts. of lead per fathom; in the back of this level, the lode, on an average, is producing tolerably good work. In the west cross-cut, driven from this level, the lode, or course, mentioned in my last report, is now divided into branches, and disordered—the ground continues favourable. We sampled, on Tuesday last (computed), 54 tons of ore, of good quality—samples of which are sent to the different smelters for their offers. I beg to remark that, as we have now the 55 fm. level, both north and south, in course of driving, and the ground favourable, we shall at once be in a position to increase our returns considerably above this last parcel.

Consolidated Mines.—The usual two-monthly meeting of adventurers was held at the account-house, on the 19th inst., when the following statement of accounts, for May and June, was submitted and passed:—By balance at last account, 2104*l.* 19s. 6d.; ores sold, less dues, 7399*l.* 8s. 4d.=9504*l.* 7s. 10d.—To costs and merchants' bills, 7289*l.* 7s. 9d.—Balance in favour, 2215*l.* 0s. 1d.

Fowey Consols.—At a special general meeting of adventurers, held on the 20th inst., the accounts for January, February, March, and April, showing a loss for those months of 844*l.* 3s. 10d., and of which the following is an abstract, were allowed:—By balance in purser's hands on the 31st of December, 7698*l.* 15s. 5d.; ores sold, &c., 12,579*l.* 18s. 6d. = 20,278*l.* 13s. 11d.—To costs, &c., for January, February, March, and April, 13,294*l.* 14s. 1d.; West Fowey Consols, for ores sold in September, 129*l.* 8s. 3d.=13,424*l.* 2s. 4d.: balance in purser's hands, to be carried to the next account, 6854*l.* 11s. 7d.—A proposition was made at this meeting, that the balance should, in future, be placed in some bank, in order that interest might be received thereon. It was, however, lost, there being no seconder.

Tresavean.—A meeting of adventurers was held on the mine on Tuesday last, when the accounts, of which the following is an abstract, were presented and allowed:—By balance at last account, 911*l.* 2s. 9d.; ores sold (less dues), 2094*l.* 13s. 7d.; sundry credits, 188*l.* 7s. 3d.=3194*l.* 3s. 7d.—To cost and merchants' bills, 2433*l.* 6s. 1d.; balance now in the bank, 760*l.* 17s. 6d.

Trethellan.—At a meeting of adventurers, which took place at Tresavean account-house, on Tuesday last, the following accounts for May and June were passed:—By balance at last account, 445*l.* 5s. 1d.; ores sold (less dues), 414*l.* 16s. 5d.=860*l.* 1s. 6d.—To costs and merchants' bills, 388*l.* 18s.: balance at the banker's, 471*l.* 3s. 6d.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

Condurrow.—You have, of course, heard of the great improvement here before this. The discovery made, a fortnight since, is as good, or better than ever—it is in the 60 fm. level, bottom end, east of engine-shaft, and worth at least 40*l.* a fm.; the bottom end west is also improved, and worth from 15*l.* to 20*l.* per fm.; there are also some improvements in the north lode.

Rix Hill Tin Mine (near Tavistock).—The prospects of this sett are of the most cheering nature; a splendid stone of tin is to be seen at the account-house, supposed to weigh 700 lbs., raised about a month since. The new engine and stamps are completed, and work most satisfactorily.

Ashburton.—A valuable lode of tin, copper, and lead, has been discovered on the banks of the River Dart, near Holne Parke House, about two miles from this town, by Capt. Collings. The specimens taken out are exceedingly fine, and the appearance of the lode promises well to the shareholders, who are in the highest expectations of its being a good remuneration. The shares, previous to an engine being erected, are selling at a low price, and the mine will well repay a visit from those who are interested in mining pursuits.—*Plym. Jour.*

The Electrical Eel.—Mr. Isham Baggs delivered an interesting lecture, on Tuesday evening, at the Royal Polytechnic Institution descriptive of the anatomical and physiological properties of this singular and little-understood phenomenon of the deep. Its general anatomy is very striking. In a fish of moderate size—say, four or five feet in length—the head, the organs of digestion, of respiration, and circulation, are all comprised within the longitudinal space of a few inches; while the rest of the body is almost exclusively occupied by the electrical organs. It is, in fact, a very short fish, with a very long and powerful battery appended to it. From a calculation made by the lecturer, and which was founded upon accurate anatomical observation of dissected specimens, it appears that, in a fish of average size, there are about half-a-million of separate cells in the electric organs, and these cells expose a total surface of about 900 superficial feet. The organs in question are most plentifully supplied with nerves. According to the statements of the celebrated John Hunter, the number and quantity of nerves distributed through the batteries of electric fish far exceed those which ramify the most perfect part of any other animal, even of the highest organisation. The curious and interesting method of catching the eels, by means of the wild horses of South America, was fully described. The construction and habits of the torpedo, the silurus electricus, &c., were briefly entered into, and the wonderful power of defence and preservation with which Nature has gifted these marvellous creatures, was illustrated by a variety of experimental demonstrations with the galvanic battery. The remarks of Mr. Baggs were appropriate, and the experiments of a satisfactory and pleasing nature; but the time allotted to the lecture (half-an-hour) was totally inadequate for so lucid an exposition, or so fair a test and description of the experiments, as the lecturer was evidently prepared to illustrate the subject with. The audience was a very numerous one, and were evidently highly gratified with what they heard—regretting only, as it appeared to us, the shortness of its duration. Mr. Baggs is clear in his delivery, matter, and experiments; and, from the interest evinced by the auditory, seems to be highly popular with the visitors of the institution.

LATEST CURRENT PRICES OF METALS.

LONDON, JULY 28, 1848.

	£	s.	£	s.	d.		£	s.	£	s.	d.
Iron—Bar *a*..Wales..*ton*	5	15	—	6	0	Copper—Ord. bottoms ..	0	0	—	0	10
,, ..London ..	0	0	—	6	15	0	Yellow Metal Sheathing	0	0	—	0	7½
Nail rods ,, ...	0	0	—	7	15	0	Tin—Com. blocks *g*..*cwt.*	0	0	—	3	15
Hoop(Staf.) ,, ...	0	0	—	8	15	0	,, bars	0	0	—	3	16
Sheet ,, ,, ...	0	0	—	9	15	0	Refined	0	0	—	3	18
Bars ,, ,, ...	0	0	—	8	10	0	Straits *h*	0	0	—	3	14
Welsh cold-blast foundry pig ..	3	10	—	4	5	0	Banca	0	0	—	4	0
Scotch pig *b*, Clyde	0	0	—	2	5	0	Tin-Plates—Ch., IC *i*, *box*	1	8	—	1	10
Rails, average	0	0	—	6	0	0	,, IX ...	1	14	—	1	16
Chairs	0	0	—	4	0	0	Coke, IC	1	5	—	1	6
Russian, CCND *c*..	0	0	—	—			,, IX	1	11	—	1	12
,, PSI	0	0	—	—			Lead—Sheet *k* .....*ton*	0	0	—	17	0
,, Gourieff	0	0	—	—			Pig, refined	0	0	—	18	0
,, Archangel	0	0	—	13	0	0	,, common	16	0	—	16	10
Swedish *d*, on the spot	0	0	—	11	5	0	,, Spanish, in bd.	0	0	—	16	10
,, Steel, fagt.	0	0	—	15	0	0	Red.....	0	0	—	18	10
,, ,, kegs *e*	0	0	—	13	10	0	Dry White.....	0	0	—	23	0
Copper—Tile *f*	0	0	—	78	10	0	Shot (Patent).....	0	0	—	19	10
Tough cake	0	0	—	79	10	0	Spelter—(Cake) *l* on spot	14	10	—	14	15
Best selected	0	0	—	82	10	0	,, (for arrival	0	0	—	—	
Ordin. sheets, *lb*...	0	0	—	0	0	9	Zinc—(Sheet) *m* export.	20	0	—	21	0
							Quicksilver *n* .....*lb.*	0	0	—	0	3

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto in bond. *e* In kegs ½ and ¼-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent.

Iron.—Prices of Welsh and Staffordshire have been pretty well maintained, with a rather improved demand, but Scotch pigs are dull this week; in other metals, the business since our last has been quiet, and we have no change to notice, except in Spelter, which has advanced, in consequence of a demand for home consumption, from 13*l.* 15s. to 14*l.* 15s., sellers.

GLASGOW PIG-IRON TRADE, July 27.—In the prospect which we lately had of the conclusion of an armistice between the Germans and the Danes, and of the general appearance of improvement in trade, our pig-iron market kept very firm, and the article showed a decided tendency to advance in price; but, now that there is no immediate prospect of an armistice being agreed to, and with the alarming accounts received from Ireland, we have experienced a slight decline in price, and the market to-day closed heavily. The price for mixed Nos. may be quoted at 45s.—cash.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars .... per oz.	£3	17	9	New dollars ..... per oz.	£0	4 10
,, Portugal pieces....	3	0	0	Silver in bars (standard)	0	4 11½

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending July 22, was 16,376; amount of money, £68 4s. 8d.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning Eleven o'clock.

Bank Stock, 9 per Cent., 198 7 6	Belgian, 4½ per Cent., 68
3 per Cent. Reduced Ann., 86¼ 6	Dutch, 2½ per Cent., 43½ ¾
3 per Cent. Consols Ann., 86½ 6	Brazilian, 5 per Cent., 70½
3½ per Cent. Ann., 86⅝ 6	Chilian, 3 per Cent., —
Long Annuities, 8⅜	Mexican 5 per Cent., 17¼ ⅝
India Stock, 10½ per Cent., 240	Russian, 5 per Cent., 99½
3 per Cent. Consols for Acct, 86½ ¼	Spanish, 5 per Cent, 11¼ ⅜
Exchequer Bills, 1000*l.* 2d. 29 34 pm.	Ditto 3 per Cent., 21½

MINES.—We can scarcely say that the mining share market has improved since our last; still there has been more inquiries for particular mines, although but little business has resulted. We learn from Cornwall, that several important discoveries have been made, and we, therefore, trust it will produce some influence in the market.

We have been advised of improvements in Carn Brea, South Wheal Francis, South Wheal Basset, and Condurrow. Buyers have consequently been seeking shares at former, and, in some instances, advanced prices. Trelawny and Mary Ann are also stated to have improved.

Some business in Devon Great Consols has been done during the week, notwithstanding her last monthly sale realised only 6255*l.* (exclusive of carriage), being the smallest amount since she headed the ticketing list; but, with an improved standard, they could increase her returns full one-third more. We were in error last week, in stating that the dividend declared was "for the past two months;" it should have been, for the months of March and April; and the balance in hand, instead of being 12,000*l.*, amounts to 14,458*l.*, in cash, Exchequer bills, and bills for ores sold. We have been favoured with a sight of the last weekly report, as well as a private letter, detailing some great improvements at several important points. The lode in the eastern shaft, at Wheal Fanny, had very materially improved, being very large, and worth full 70*l.* per fathom. In the 35 fm. level, east of the same shaft, the lode was worth 60*l.* per fathom; and in the 35, west of the western shaft, there was an exceedingly fine and productive course of ore, equal to 200*l.* per fathom. In Wheal Anna Maria shaft there was also a fine course of ore, worth full 120*l.* per fm.; whilst in Hitchens's shaft, at Wheal Josiah, the lode was equally productive for the length of the shaft, worth 25 tons of ore per fathom.

Shares in the following mines have changed hands during the week—viz.: Devon Great Consols, East Wheal Rose, South Wheal Basset, Carn Brea, Trelawny, South Wheal Francis, Condurrow, Bedford United, Trehane, Stray Park, Trethellan, Treviskey and Barrier, East Tamar, Herodsfoot, Mary Ann, Antimony Silver-Lead, &c.

Treviskey and Barrier two-monthly account meeting was held on the 17th, when a dividend of 50s. per 120th share was declared from the former, leaving a balance of 64*l.* 13s. 8d. in hand on the two mines, exclusive of the ore bills coming due.

Wheal Trehane bi-monthly meeting was held on Thursday, the 20th, when a dividend of 20s. per 256th share was declared, payable on the 27th. The balance in hand appears to be 438*l.*, with the ore bill coming due, out of which the present dividend is to be taken. From the opening and driving of the lode in the 55 fm. level the returns will be considerably increased by the next meeting.

West Wheal Providence account meeting was held on the 19th, when the accounts for March, April, and May, were audited, and a dividend of 20s. per share declared. The costs for the three months amounted to 474*l.* 3s. 4d.; the sales of tin, copper, and arsenical ores, realised 774*l.* 6s. 10d. (less dues)—balance in hand, 259*l.*

The Cobre half-yearly meeting was held on Tuesday, the 25th, when a dividend of 1*l.* per share was declared, payable on and after the 3d of August. The profit on the year's workings amounted to 22,902*l.* 8s. 6d. A dividend of 12,000*l.* was paid in January last.

The United Mexican Mining Association held their half-yearly meeting, on Wednesday, the 26th inst., when a dividend of 5s. per share was recommended by the directors, and adopted by the meeting. The quantity of ores raised amounted to 41,869 cargas. The association coinage realised, in 1846, $757,681; and, in 1847, $922,115—being an increase of $164,434. After payment of the dividend, a balance of about 4000*l.* would remain, exclusive of $108,110 in the local manager's hands. The mines are represented to be in a more favourable position, and the reasons assigned, with the fullest particulars, will be found in another column.

The two-monthly meeting of shareholders in Great Rough Tor Consols was held on Saturday last, when the agent's reports were received with evident satisfaction by the proprietors, who feel assured that, with the exercise of capital, industry, and forbearance, they will ultimately have a valuable mine. A call of 25s. per 512th share, payable on the 17th of August next, was deemed necessary, to discharge present liabilities and future operations.

The East Tamar Consols Mining Company held their bi-monthly meeting on Monday last. The chairman, with great perspicuity, represented the pleasing prospects of their operations for the past two months, showing a profit, with considerable increasing returns—to which a valuable discovery, recently made, would largely contribute, from whence no advantage had been derived.

The half-yearly general meeting of the Holyford Copper Mining Company was held on Wednesday, the 26th inst. The agent's report represented the mine in a flourishing position, an improved standard only was required to enable the directors to increase the dividends. The accounts presented show the returns of ore between July, 1847, and Feb., 1848, amounted to 9042*l.* 10s. 9d. (less dues). Two dividends of 2*l.* and 1*l.* per 1000th share had been paid during the half year, and the balance in hand amounts to 1910*l.* The meeting authorised the directors to declare dividends at their discretion before the next meeting.

The annual meeting of the Barossa Range Mining Company was held on Wednesday last, when a call of 10s. per share was made, payable by two instalments. The last advices from the colony were considered very favourable—extensive operations being now carried on at the company's mines—Greenock Creek and Lynedoch Valley; at the former mine, ores of good quality are now ready for shipment; and at Lynedoch, a large and promising lode has been discovered. The company appear to expect great advantages from the smelting about being established in the colony, as at Greenock Creek large quantities of ore are returned, which would pay well for smelting there.

The annual meeting of the Copiapo Mining Company was held on Thursday last; but we are precluded from furnishing information, as the proceedings of the meeting, or the progress of the mines, are carefully withheld.

Full details of the meeting of Cameron's Steam-Coal and Swansea and Loughor Railway, held yesterday, as also the Trenance Mines, and several other meetings, held during the week, will be found in another column.

Notwithstanding the heavy drawback inflicted by the present standard for copper ore, as well as the depressed value of the metal market generally, we find, from the reports of account meetings of the several companies which have been held during the week, that the returns from the respective mines, and their prospects generally, are of a highly satisfactory character; and, although adventurers in many mines feel themselves necessitated to withhold returning more ores than will pay the cost of working, rather than submit to the ruinous prices afforded by the smelters, we are gratified to perceive that there are not a few who will, in all probability, emerge from its lamentable consequences. Perhaps it would not be unadvisable to draw the attention of adventurers, at their two-monthly meetings, to the prices charged for materials generally in use. The chief articles of consumption—such as timber, iron, &c.—are now considerably reduced in price. This, in connection with the cheapness of labour, would materially assist the mines in the present critical position of the mining interest.

In foreign mines several transactions have taken place in Bolanos, St. John del Reys, Imperial Brazilians, Copiapos, Mocaubas, and Cocaes, but more particularly United Mexicans, which have been done at an advance. These shares, for some weeks past, have been in request, arising from the expected remittance from the mines, which was received per *Forth* steamer, on Saturday last, amounting to $70,000, and 2000*l.* in bills of exchange, and also in anticipation of a dividend, which was declared at the meeting on Wednesday last.

By the East Indian Mail, received on Tuesday, we learn that the metal markets of Bombay, Calcutta, Madras, and China, were very dull. At Bombay few sales had been effected in the metal trade, although some in copper sheathing are reported. At Calcutta the transactions in iron have been rather large; spelter and steel limited; in copper, lead, and tin, little or nothing has been done. The *Hong Kong Register* advises but limited business in copper or tin. Lead had advanced, and but a moderate stock remains on hand. Iron had slightly declined, but a fair amount of business had been done.

The Royal Mail Steam-packet Company's ship *Forth*, arrived at Southampton, on Sunday night, the 23d inst., from the West Indies, having on freight $1,133,277, on merchants' account, and gold coin, value 4200*l.*—total value of specie, 270,900*l.*

The Peninsular and Oriental Company's steam-ship, *Montrose*, arrived at Southampton, on Monday, the 24th inst., having 59 packages of specie on freight—value, 30,000*l.*

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7	—
512	Albert Consols	1	2½
1024	Alfred Consols	4½	5
235	Andrew and Nangiles	28½	5
1000	Antimony and Silver-Lead Mining & Smelting	5	5
1024	Ashburton United Mines	7¾	10
1624	Balleswidden	9	18
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	6	6½
1000	Barristown	4½	1
4000	Bedford	2½	2
1244	Birch Tor Tin Mine	9½	2½
8000	Blaenavon	50	17½
100	Botallack	175	60
120	Brewer	5	7
10000	British Iron, New, regis.	10	13
—	Ditto ditto, scrip	10	10
128	Budnick Consols	52½	35
128	Callestock	17	30
1000	Callington	19	20
1000	Camborne Consols	5	6½
20000	Cameron's Steam Coal	6	1
256	Caradon Copper Mine	9½	2
256	Caradon Mines	22½	10
256	Caradon United	24	2½
256	Caradon Wh. Hooper	21	10
1000	Carn Brea	15	92½
3000	Carthew Consols	1½	6
2048	Cascade	1	2
112	Charlestown	220	60
512	Coatlithe Hill	¾	1
500	Comblawn	5¼	6
128	Comfort	45	50
256	Condurrow	20	28
2560	Cook's Kitchen	14	2
1000	Coombe Valley Quarry	3	4
6500	Cornish Mining Co.	2	2¾-½
1000	Copper Bottom	1½	6½
1024	Cosheen	4½	20
225	Craddock Moor	16½	5
128	Creeg Braws	120	100
500	Cubert Mine	12½	10
1000	Cwm Erfin	3½	3½
300	D. Prior & Buckfastleigh	14	26
7100	Derwent	8½	5
845	Devon & Courtenay Con.	7¾	1¼
1024	Devon Great Consols	1	210
1000	Dhurode	2	5
186	Dolcoath	30	15
2560	Drake Walls	4	4
10000	Durham County Coal	45	9
3000	Dyfngwm	10	12½
512	East Alvenney	5½	12½
112	East Caradon	47	47
2048	East Crowndale	5½	2
512	East Combe Silver-Lead	6½	6½
128	East Pool	5	7
100	East Relistian	22	40
9000	East Tamar Consols	¾	1
—	East Wheal Albert	1	3
94	East Wheal Crofty	125	280
1024	East Wheal Fortune	2	3
1024	East Wheal Friendship	3	3½
128	East Wheal Rose	50	800
—	East of Scotland Iron Co.	2½	1½
123	East Wheal Seton	14	10
256	Elborough	1½	2
256	Exmoor Wh. Eliza	4	6
512	Fowey Consols	40	45
6400	Gadair	2	2
20000	Galvanised Iron Co.	10	5
4000	Gen. Mining Co. for Irel.	1½	1½
2048	Georgia Tin Mines	1½	1½
2048	Goldscope Mine	2	2
256	Gonamena	34	35
128	Goonvrea	4	1½
100	Great Consols	1000	400
2560	Great Michell Consols	1½	2
256	Great Resugga Moor	11	6
512	Gt. Wh. Rough Tor Con.	15½	20
100	Grogwinion	5	—
256	Gwinear Consols	7	3½
6000	Heligston Down Con.	¼	2½
256	Herodsfoot	18	28½
10000	Hibernian	12½	1¾
239	Hobb's Hill	6	3
1000	Holmbush	19	5-4
827	Kirkcudbrightshire	5½	2
2048	Lamherooe Wh. Maria	11	4
128	Lelant Consols	90	60
160	Levant	—	120
1000	Lewis	15	6½
1000	Llwyn Malees	5	—
3600	Llynvi Iron	50	50
256	Lostwithiel Consols	15	15
6000	Marke Valley	10	2
5000	Mendip Hills	2½	¾
5000	Merionethshire Slate & Slate Slab Co.	1½	2
128	Metha	34	133
20000	Mining Co. of Ireland	7	3¾-4
256	New East Crowndale	3¾	3¾
128	North Fowey Consols	37	10
100	North Pool	45	350
140	North Roskear	5½	155
256	North Wh. Abraham	1	1
262	North Wh. Leisure	1½	2
15000	Northern Coal Co.	23	2
128	Par Consols	—	1000
4000	Pennant	1½	1
100	Penrhiw	30	65
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	10
512	Plymouth Wh. Yeoland	6½	23
256	Polsaith Consols	4½	7
10000	Rhymney Iron	50	13
10000	Ditto New	7	6¾
1000	Rosewall Hill	1	5
256	Rosewarva Mines	—	12
3072	South Callington Mine	2	1
128	South Caradon	10	400

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
1100	South Dolcoath	4	4
256	Sth. Friendsh. Wh. Ann	20	4
200	South Harvannah	10	25
256	South Molton	5	8
256	South Tolgus	10	30
256	South Trelawny	20	12
128	South Wheal Basset	110	105
256	South Wh. Betsey	2½	12½
124	South Wh. Frances	160	185
1000	South Wh. Maria	2½	1½
10000	Southern & Western, Irish	2	4
280	Spearne Moor	30	40
256	St. Austell Consols	9	—
94	St. Ives Consols	—	320
128	St. Michael Penkivel	5	10½
999	St. Minver Consols	1	6
1000	Stray Park	43	15
9600	Tamar Consols	3	5½
1024	Tavy Consols	4	8
6000	Tincroft	7	5½
1000	Tin Vale	2½	4½
128	Tokenbury	152½	10
256	Tollpetherwin	3½	5
256	Tregordan	½	5
256	Trehane	2¾	25
5000	Treleigh Consols	6	2¼
2000	Trenance	3	18
96	Tresavean	10	210
120	Trethellan	5	15
120	Treviskey and Barrier	130	90
288	Trevean	1½	5
100	United Mines	300	350
256	Wellington Mines	15	10
128	West Basset	45	10
256	West Caradon	20	100
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Providence	9	12
200	West Seton	40	160
—	West of Scotland Iron Co.	210	210
120	West Trethellan	5	30
256	West United Hills	—	4
512	West Wheal Frances	1¾	2
256	West Wh. Friendship	9	8
3725	West Wheal Jewel	11	1
2560	West Wh. Maria	3	1
256	West Wheal Tolgus	21½	7
256	West Wheal Treasury	19	8
5200	Wicklow Copper	5	10¼
184	Wheal Adams	51	10
1000	Wheal Agar	—	8
256	Wheal Albert	10	1
256	Wheal Allen	2	5
240	Wheal Anderton	23	27
128	Wheal Ann	—	50¼
512	Wheal Anna Maria	8	6½
1024	Wheal Ash	4½	8
120	Wheal Bal	5½	20
2560	Wheal Barbara	1½	4-5
256	Wheal Benny	12½	7
256	Wheal Blencowe	21	5
256	Wheal Bucketts	20	5
256	Wheal Calstock	5	10
136	Wheal Clifford	190	50
1024	Wheal Coad	½	5
268	Wheal Courtenay	12½	15
6000	Wheal Curtis	3	½
256	Wheal Fortescue	6½	5
388	Wheal Franco	27	20
128	Wheal Harriet	45	50
256	Wheal Jane	21	15
1024	Wheal Lawrence	2¾	6
256	Wheal Louisa	8½	8
112	Wheal Margaret	79	250
512	Wheal Mary Ann	5	14
237	Wheal Mary Consols	42½	5
210	Wheal Prospect	4	7
120	Wheal Reeth	41	150
128	Wheal Rose	60	15
99	Wheal Seton	214	700
194	Wheal Sisters	32½	12
512	Wheal Sophia	3¾	5
128	Wheal Spearne	10	75
128	Wheal St. Ann	9	15
550	Wheal Trescoll	2	10
260	Wheal Trelawny	7¾	60
256	Wh. Tremaine (St. Ervan)	4½	1½
1024	Wheal Tremayne	35	1¼
92	Wheal Tryphena	140	265
242	Wheal Venland	29¾	30
256	Wheal Vlow (Perranz.)	¾	¾
184	Wheal Vyvyan	—	60
256	Wheal Williams	6	8
1024	Whiddon Mines	4¾	4¾

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	2½-3
15000	Asturian Mining Co.	12	1½
20000	Australian	2	1½
10000	Anglo-Mexican Co.	100	2
12374	Ditto Subscription	25	2¼
6000	Barossa Range	¼	1½
3000	Bolanos	150	3
2000	Ditto Scrip	15	3
12000	Brazilian Imperial	23	3
10000	Cobre Copper Co.	40	15
10000	Copiapo Mining Co.	14	2¼
10000	General Mining Ass'n.	20	11½-12
5000	Kinzigthal Mining Ass.	2	3
20051	Mexican Company	59	—
2000	Mexican & South Amer.	8	½
5000	Mocaubas & Cocaes	30	6
100000	N. Brit. Australasian	1	½
29320	Rl. del Monte, regis. / Ditto unregistered	28¾	¾-¾
	Ditto Red Debentures	—	4
	Ditto Black ditto	—	3
	Ditto Loan Notes	150	26
7000	Royal Santiago	10	5
11000	St. John del Rey	15	8½-¾
43174	United Mexican … Av.	28½	4

*** We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	Traffic Returns. 1848	1847
Birkenhead, Lancashire, & Chesh.	15	997,284	37	5 *p.c.**	£857	£819
Caledonian	130	3,594,470	26½	—	4431	—
Chester and Holyhead	59½	2,871,470	26½	—	1480	—
Dublin and Drogheda	35	754,529	23½	—	866	965
Dublin and Kingstown	7¾	473,282	—	6	995	1151
Dundee, Perth, & Aberdeen Junc.	47	415,073	26	8	1264	1021
East Anglian (Lynn to Ely)	55½	1,062,742	5½	—	652	—
East Lancashire	26	1,733,915	17½	—	1172	896
Eastern Counties and Norfolk	295	9,833,859	14½	4	16602	14508
Eastern Union	51¼	979,926	20	—	1454	1069
Edinburgh and Glasgow	53	2,481,767	38	—	3504	4234
Edinburgh and Northern	29	1,392,092	17½	4*	1866	—
Glasgow, Paisley, and Ayr	64½	2,097,321	72½	6	2410	3369
Glasgow, Paisley, & Greenock	23	845,554	15	4	1351	1564
Gt. Southern & Western, Ireland	110½	1,809,787	25½	4*	3166	1705
Great Western	281¾	10,970,636	87	7	21836	21190
Kendal and Windermere	10½	169,888	23	—	234	219
Lancaster and Carlisle	70	1,395,193	58	4	2113	1436
Lancashire and Yorkshire	136¾	7,597,618	86	7	11329	10143
London and North Western	428	21,513,354	125½	8	47170	49086
London and Blackwall	4	1,241,061	4½	1¾	1411	1445
London, Brighton, & South Coast	161½	6,087,822	31¾	4	11230	9490
London and South-Western	189	6,264,164	46½	8	11895	11802
Londonderry and Enniskillen	14½	145,135	16	—	174	148
Manchester, Sheffield, & Lincolnsh.	62	2,336,624	61½	5	3021	2180
Maryport and Carlisle	28	440,851	40	—	592	604
Midland Company	422½	9,853,122	102	7	22798	20831
Midland Great Western (Irish)	36½	725,332	10½	4*	924	870
Newcastle and Carlisle	66½	1,407,375	110	6	2186	2586
North British	81	2,800,748	22	5	2412	2073
Scottish Central	33	——	22	—	1007	—
Shrewsbury and Chester	17	780,272	14	—	632	530
South Devon	50½	1,609,071	14	—	1778	830
South-Eastern	165½	6,932,181	24	6½	10412	10245
Taff Vale	38	820,056	125	5½	1877	1427
Ulster	36	684,684	45¾	4½	790	781
Whitehaven Junction	12	147,095	7	4½	175	231
York, Newcastle, & Berwick	242½	4,466,526	32	9	13100	10784
York and North Midland	230½	3,799,297	67	10	9101	7950

* Interest.—Total for last week, £223,107, being an increase of £28,591 over last year.

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—Silver bars to Hamburgh, 104,500 ounces; ditto Rotterdam, 201,650; ditto Petersburgh, 20,000—Silver coin to Hamburgh, 206,400; ditto Belgium, 31,216; ditto Rotterdam, 217,000; ditto Calais 1050—Gold to Hamburgh, 1351; ditto to Rotterdam, 1886; ditto Havre, 58; ditto Calais, 250; ditto Mauritius, 500.

IMPORTANT TO MINE ADVENTURERS—FULFORD AND OTHERS *v.* TRIPP.—The defendant in this case, which was tried before J. Tyrrell, Esq., in the County Court of Devon, at Exeter, on the 16th of June last, and in which the judge decided that the defendant was liable for, and ordered him to pay, calls made in respect of certain shares held by him in the Wheal Anna Maria Copper Mining Company, at Dunsford, Devon, has applied to a judge of one of the superior courts, and the decision of the judge of the County Court has been confirmed by Mr. Baron Alderson.

ACCIDENTS.

Rowley Regis.—W. Fowler was dreadfully burned, by an explosion at the British Iron Company's New Lion Colliery.

Kingswinford.—J. Aston was killed, by the breaking of a rope to which he had attached an improper weight, at the Pensnett Colliery.

Tondu Iron-Works, Bridgend.—As D. Rees and E. John were excavating coal in one of the levels, they struck into an abandoned portion of the colliery, which was filled with water: the rush was so great, that they were carried away, tearing everything before it, and filling a considerable portion of the works with rubbish and water. The works are the property of Sir Robert Price, Bart., M.P.

SILVER-LEAD ORE.

Sold at Helston.

Mine.	Tons	cwts.	qr.	Price per Ton.	Purchasers.
Wheal Rose	59	3	1	£19 13 6	R. Michell & Son.

Amount of money £1178 3s. 1d.

LEAD ORES.

TICKETINGS FOR ABOUT 80 TONS LAXEY LEAD ORE.

Douglas, Isle of Man, July 22.

Bidders.	Price per Ton.
Walker, Parker, and Co. (purchaser)	£17 7 0
Mather and Co.	17 5 0
Benj. Somers	17 3 0
Newton, Keates, and Co.	15 12 6
Sims, Willyams, and Co.	15 0 0
Tamar Smelting Company	14 18 0
Combmartin Smelting Company	14 10 0

BLACK TIN.

Mines.	Tons.	Amount.	Purchasers.
Charlestown	4½	£39 12 6	Daubuz and Calenick Co.
ditto	3¾	39 5 0	ditto and ditto.
ditto	½	28 10 0	Calenick Smelting Co.

COPPER ORES.

Sampled July 12, and Sold at Pearce's Hotel, Truro, July 27, 1848.

Mines.	Tons.	Price	Mines.	Tons.	Price.
Consols Mines	102	4 10 0	Treviskey	49	£3 7 6
ditto	90	4 12 6	ditto	33	4 0 6
ditto	88	4 16 6	ditto	31	1 12 6
ditto	78	2 18 6	Par Consols	97	3 13 6
ditto	77	3 2 0	ditto	80	4 14 6
ditto	74	2 4 6	ditto	63	4 1 6
ditto	67	3 11 0	ditto	60	7 14 6
ditto	65	3 7 0	South Caradon	85	6 14 0
ditto	58	6 13 6	ditto	60	4 16 0
ditto	50	5 7 6	ditto	45	4 13 6
ditto	45	4 8 0	ditto	42	5 14 6
ditto	37	6 0 6	ditto	18	4 2 6
ditto	2	32 5 0	Trethellan	48	2 0 6
ditto	1	15 15 0	ditto	47	3 8 6
United Mines	124	2 16 6	ditto	41	2 1 0
ditto	117	4 5 6	ditto	37	1 17 6
ditto	103	2 6 0	Wh. Comfort	61	1 19 0
ditto	84	4 2 0	ditto	48	1 16 0
ditto	81	2 9 0	ditto	36	4 0 6
ditto	63	4 15 6	St. Aubyn	66	2 1 0
ditto	61	1 9 0	ditto	36	5 1 0
ditto	55	2 5 6	Grambler	42	4 10 0
Tresavean	85	3 1 6	Treleigh Consols	60	8 19 0
ditto	80	5 1 6	ditto	55	3 10 6
ditto	67	2 11 0	Wh. Ellen	97	5 10 6
ditto	58	4 5 6	Wh. Music	15	6 3 6
ditto	44	3 16 0	Wh. Mary Consols	111	5 7 0
ditto	41	2 15 0	Barrier	59	3 7 0
ditto	40	3 0 6	ditto	30	4 7 6
ditto	38	1 14 0	Wh. Andrew	46	3 18 0
Perran St. George	69	2 7 0	Nangiles	34	4 11 0
ditto	67	3 3 0	ditto	6	2 0 0
ditto	54	1 17 0	Wh. Clifford	60	2 15 6
ditto	48	3 8 6	ditto	9	2 14 0
ditto	43	2 0 6	Wh. Prudence	39	2 0 6
ditto	40	2 0 6	ditto	18	2 13 0
ditto	86	3 14 6	South Tolgus	43	2 16 0
ditto	20	4 15 6	Wh. Sisters	40	3 2 6
Bolenna	53	6 15 6	Wh. Henry	30	3 2 6
Treviskey	71	5 11 6	ditto	6	1 10 0
ditto	66	4 12 0	Wh. Vyvyan	26	5 5 0
ditto	65	6 7 0	Ting Tang Consols	23	2 19 0

TOTAL PRODUCE.

Mines	Tons	Amount	Mines	Tons	Amount
Consols Mines	834	£3533 0 6	Wh. Ellen / Wh. Music	112	£628 11 0
United Mines	688	2174 2 6	Wh. Mary Consols	111	593 17 0
Tresavean	453	1551 14 6	Barrier	89	328 18 0
Perran St. George / Bolenna	430	1394 5 0	Wh. Andrew & Nan.	86	346 2 0
Treviskey	315	1469 15 0	Wh. Clifford	69	190 16 0
Par Consols	300	1454 14 0	Wh. Prudence	57	126 13 6
South Caradon	250	1382 11 6	South Tolgus	43	120 8 0
Trethellan	173	411 12 0	Wh. Sisters	40	125 0 0
Wh. Comfort	145	350 5 0	Wh. Henry	36	102 15 0
Grambler & St. Aub.	144	506 2 0	Wh. Vyvyan	26	136 10 0
Treleigh Consols	115	730 17 6	Ting Tang Consols	23	67 17 0

Average Standard £ 87 5 0 | Average Produce 7¾

Average Price per ton £3 18 0

Quantity of Ore 4539 tons. | Quantity of Fine Copper, 345 tons 19 cwts.

Amount of Money £17,717 7 0

LAST SALE.—Average Standard £ 78 8 0.—Average Produce 9¾

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	349	£1362 14 10
Vivian and Sons	946	3664 17 11
Freeman and Co.	620	2451 2 3
P. Grenfell and Sons	1015	3821 19 9
Sims, Willyams, and Co.	945	3397 18 9
Williams, Foster, and Co	664	3018 13 6
Total tons	4539	£17,717 7 0

Copper ores for sale on Thursday next, at Tyack's Hotel, Camborne.—Mines and Parcels.—North Pool 900—Wheal Seton 569—Camborne Vean 513—East Wheal Crofty 448—Tincroft 290—South Wheal Basset 285—Condurrow 242—Fowey Consols 240—East Pool 209—Dolcoath 199—South Wheal Frances 168—Wheal Bucketts 78—Wheal Mary 43—Total quantity of ore to be sold, 4184 tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Carn Brea 770—Par Consols 312—Wheal Agar 70—Wheal Tremayne 67—Wellington Mines 40—Hayle Slag 40—Wheal Jane 35—Wheal Pleasant 11—Gwinear Consols 10.—Total quantity of ore to be sold, 1355 tons.

COPPER ORES.

Sampled July 5, and Sold at Swansea, July 27, 1848.

Mines.	Tons.	Prod.	Price.	Mines.	Tons.	Prod.	Price.
Cobre	135	14⅝	£8 4 6	Cuba	68	13½	£7 1 6
ditto	121	14½	8 4 6	ditto	121	12⅞	7 5 0
ditto	103	14⅜	8 4 6	Recompensa	118	12⅞	7 2 0
ditto	91	14⅝	8 5 6	ditto	100	9¼	4 16 6
ditto	62	14¾	8 1 6	ditto	88	13¾	7 4 0
ditto	124	14¼	8 2 0	ditto	86	12½	7 2 0
ditto	98	14¾	8 3 0	ditto	68	13⅛	7 3 0
ditto	85	22¼	12 12 6	Berehaven	123	11¼	6 2 0
ditto	60	14⅝	8 2 0	ditto	122	9⅜	5 7 6
ditto	51	22½	12 14 0	ditto	104	9¼	5 9 6
ditto	15	20½	11 14 0	Knockmahon	96	7¾	4 2 0
Cuba	130	13⅞	7 7 0	ditto	80	8⅞	5 0 0
ditto	126	13¼	7 7 0	ditto	76	8½	4 16 0
ditto	60	22¾	13 6 0	Ballymurtagh	52	4	1 16 6
ditto	58	23	13 9 0	ditto	49	6¼	3 6 0
ditto	56	22⅞	13 3 0	Burra Burra	25	32½	10 14 6
ditto	116	13¼	7 2 0	New Zealand	8	10¾	5 15 0
ditto	87	13	7 1 6				

TOTAL PRODUCE.

Mines	Tons	Amount	Mines	Tons	Amount
Cobre	945	£8391 17 6	Knockmahon	252	£1158 8 0
Cuba	822	6993 11 6	Ballymurtagh	101	256 12 0
Recompensa	460	3050 14 0	Burra Burra	25	493 2 6
Berehaven	349	1975 9 0	New Zealand	8	46 0 0

Copper ores for sale August 17.—Cobre 126, ditto 88, ditto 81, ditto 77, ditto 70, ditto 66, ditto 44, ditto 149, ditto 89, ditto 86, ditto 75, ditto 73, ditto 71.—Cuba 132, ditto 125, ditto 68, ditto 10, ditto 78, ditto 67, ditto 48.—Berehaven 112, ditto 104, ditto 97, ditto 91, ditto 87.—Chili 48, ditto 47, ditto 46, ditto 55, ditto 42, ditto 41.—Burra Burra 80, ditto 51, ditto 50, ditto 40, ditto 35, ditto 25, ditto 18, ditto 67, ditto 58, ditto 51, ditto 50.—Knockmahon 106, ditto 59.—Kanmantoo 60, ditto 57, ditto 16, ditto 5, ditto 2, ditto 1.—Ballymurtagh 50, ditto 47.—Lackamore 24, ditto 6.—Cronebane 1.—Tigroney 1.—Total quantity of ore to be sold, 3353 tons.

NOTICES TO CORRESPONDENTS.

*** We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity, that they may be published in the Journal with as little delay as possible.

A press of matter compels us to postpone several leading articles.

Errata.—In our article of last week, on the iron trade and the railways, for *auxiliary*, read *ancillary*; and, in an article of the preceding week, on the revenue, for "a deficiency of 25,000*l*.," read "250,000*l*."

In a recent short article on the Australias, for the passage as it stands, read—"The former of these is the old colony, of which the chief town is Sydney; and, together with the great district adjoining, is, at this moment, making rapid advances in wealth and civilisation."

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JULY 29, 1848.

We are always reluctant to make severe remarks on the management of any company, and it is only when the errors committed are too glaring to be avoided, and when we consider that the interests of the shareholders demand it, that in the discharge of our public duty, we are compelled to draw attention to such cases. We have frequently referred to the NORTH BRITISH AUSTRALASIAN COMPANY, of Aberdeen—and have, at different times, given information of its position and prospects, as far as our knowledge of them extended; but we do think that the directors of the company are acting in a manner that requires some explanation, in withholding from publication all official reports or statement of the affairs of the undertaking. It it now much more than 12 months since we first gave particulars of the mines at Kaw-aw, which attracted the attention of many of our readers, and, no doubt, induced some, at least, to become shareholders. We have heard of several meetings having been advertised at Aberdeen, but have never seen a single word in the shape of a report, or financial statement, made at those meetings. A meeting was held on the 10th inst., at which we understand an important resolution was agreed to; and another meeting was called for the 19th, to confirm that resolution; but what its nature was, we have not the slightest idea, nor on perusing any of the Aberdeen papers can we find any reference to the meetings—while even the advertisement does not state the nature of the resolution to be proposed, but simply mentions that it has something to do with the finances of the company, and had previously been agreed to by the managing committee. Certainly some change in this system must take place, and we are quite sure that the English shareholders will demand it. We think that as a matter of courtesy to the English shareholders, the meetings might have been inserted in some of the London papers, and also the business transacted ought to have been communicated to them, either individually or by advertisement. We presume that the managing committee is paid, and we believe they receive a considerable sum annually in the shape of fees for transfers—why, then, do they not act like other companies, and give some account of their stewardship? We can assure them that we shall not allow the matter to rest, until we see a new system adopted, and we would advise the English shareholders to take some steps in the matter; we have no doubt they will be supported by others interested in the company.

Want of leisure and want of space have prevented the earlier correction of an error which crept into one of our short articles of a few weeks since, on the Australian colonies. A good-natured contemporary has clapped his hands amazingly, and grown exceedingly cock-a-hoop, over our misstatement—unjustly, as we think; and, therefore, it will be well for him if his merriment is not let down a peg or two in the sequel. It will be in the recollection of some of our readers that recently we laid together a score or two of words, the leading intention of which was to point out the difference, notwithstanding the similarity of their titles, of the mining, the merchant, and the banking companies, connected with those important dependencies of the British Crown—the Australias. It was but incidentally, and for the purpose of introducing those companies, that we made any geographical statement at all. And, immediately after becoming aware that an error had arisen, we prepared a notice cancelling the article, except in so far as it affirmed the individuality and high respectability of the companies, of which it was almost the sole purpose of the article to speak. That notice, however, cancelling the article, was, by an oversight—they are often known to proceed in a series—omitted, and we have now the fuller pleasure of copying in the necessary correction, with a few points of additional information, which may not be without their value to those who watch the social and mercantile vicissitudes of the interesting regions of which we speak.

The possessions of England, which are stretched out in the South Pacific Ocean, comprehend, among others, the great island of New Holland—better known, perhaps, by the generic name of Australia. The space occupied by this country reaches from the 115th to the 152d meridian of longitude east, and from the 11th to the 39th parallel of latitude south—that is, it measures from east to west about 2500 miles, and north to south about 2000—equalling nearly the whole area of continental Europe. There are but three colonial districts in this vast island—the greater part of it being unoccupied and uncolonised—namely: New South Wales, whose chief town is Sydney. South-west of this is the district of Port Philip, whose chief town is Melbourne; and west of Port Philip is South Australia, whose capital is Adelaide. The measured superficies of this separate district are about three times those of the superficies of Great Britain. Separated from South Australia by Bass's Straits, is Van Diemen's Land, of which Hobart Town and Launceston are the chief *nuclei*. The great distance of these lands from us will probably operate as a hindrance to their colonisation. If they were as well within reach as Canada or New Brunswick, or the Atlantic coasts generally of the North American continent, or even the Cape of Good Hope, there would be a flocking, to their fertile and hospitable shores, of the young and active adult population of these islands; and, as it is, we believe there wants but a moderate degree of encouragement to fill the settled districts of Australia with all the labour which it is in the power of the present colonists to find profitable tasks for.

Of South Australia, the past success, and the future prospects, are of the most satisfactory kind. The Act of Parliament, founding the colony, was passed in 1834. A governor was installed in 1836, and the first sale of lands, which is the direct antecedent to all right of cultivation, took place in 1838. At this moment its population exceeds 27,000 souls—its number of acres under the plough amounts to 36,000—the amount of its annual exportations is about 320,000*l*.—and its annual revenue about 55,000*l*.—so that, in a short 10 years, in the limited space of a decade, it has been changed from an uncropped wilderness into an accumulation of neat farms and gushing granaries. In this district is situated also that rich chain of mines, whose productiveness we have had frequent occasion to bring to the notice of our readers. Having said this much as to the geographical limits, and the general character, of the extensive region before us, we shall close, for the present, our few observations. With respect to the small pedagogue, who has shaken his birch in our face, we have nothing to say, except, perhaps, this one word, that we are better occupied than in gathering up his editorial *lâches*. Vice, they say, is sometimes shocked at its own image; and we think, if we were to gather into one group, the errors we could easily lay our hands upon in his pages, they would form a nosegay, from which, whatever might be their effect upon him, the most partial of his readers would turn away disappointed and displeased.

PRACTICAL MINING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am pleased to see, in your columns, the revival of the question on the laws of "heaves." It is an interesting subject, and must tend to bring forward many valuable practical hints, which now remain buried in oblivion. I fully acquiesce in Capt. Spargo's ideas, that there are no *true heaves* in an east and west direction. In looking over my work on this subject, it will be observed, that I have described a "heave," in a north and south lode, in New Granada, but it is by an *oblique* flookan—(see Plate 18).* In chap. vii., I have endeavoured to prove, from very extensive observations, made in many parts of the world, that all the large dislocations are the effects of movements parallel to, and in the direction of, the great meridianal courses, and are governed by the propelling northward tendency of polar forces. East and west heaves are generally only apparent, or insignificant; and where they do occur, it will be found that they are the effects of sinking, or sliding, of isolated wedges of ground, as shown in Plate 10. All the great and *real horizontal heaves* conform to that shown in the diagrams in Plate 12. Whilst on this question, I beg leave to acquaint your Tavistock correspondent, that he will find the cause of the bunches of ore in that district being confined to the western side of the flookans, explained in my work, page 56, Plate 17, figure 3, an attentive perusal of which may also lead to more discoveries in that new mineral district.

Perhaps, Sir, you will be surprised, when I tell you that the polar theory, promulgated by me (by which it is possible to predict the general character of any mining district), is well known, to a certain degree, amongst the intelligent mine captains of Cornwall, and lead districts of South Wales, and is kept as a secret by the most knowing ones. They maintain, that it would not be prudent, nor to the interest of mining, that more particulars should be made known, because they say, that the agents of the lord of the manor would demand more for all the profitable setts, if they knew more of the matter. This will account why there is so much reluctance to communicate their knowledge to the world, preferring the enjoyment of the *solid benefit* arising therefrom to that of mere *empty praise*, which pleasing shadow even is too often stolen away from the rightful owner.

The tributer must know more of the rich courses of the stations than his captain to make a decent living; the captain must possess more than ordinary knowledge of the mine, to be appreciated by his employers; and, again, the proprietors must preserve the secrecy of the value of their property, and that contiguous thereto, to prevent competition and intrusion, so as to enable them to make low purchases or leases. Like the secrecy of a useful process in trade, the benefit to be derived therefrom to the manufacturer is likely to be destroyed by publicity. It is, therefore, very evident, while mining speculations exist, the above feeling will continue to prevail, and mining adventurers will remain satisfied with occasional hints, like a kind of freemasonry among themselves, for their mutual benefit, without the necessity of entering into too many particulars.

I avail myself of this opportunity to acknowledge my obligations to "T. R.," and other persons in Cornwall and Aberystwith, during my absence from England, in their endeavours to prevent the honour due to the application of polarity to mining being robbed from its rightful owner. My friend, Mr. W., of Helston, need not be afraid that *lectures* can cast a shade on the labours of practical men—*Truth* must always prevail; and, while men are governed by the latter, and not by the former, there is no danger of being led astray.

Clapham, July 28. E. HOPKINS.

* "On the Connexion of Geology with Terrestrial Magnetism: showing the General Polarity of Matter, the Meridional Structure of the Crystalline Rocks, their Transitions, Movements, and Dislocations, including the Sedimentary Rocks, the Laws regulating the Distribution of Metalliferous Deposits, and other Magnetic Phenomena." By Evan Hopkins, C.E., F.G.S. London: Richard and John Edward Taylor, Red Lion-court, Fleet-street; to be had also at the *Mining Journal* Office, 26, Fleet-street.

THE ASTURIAN MINING COMPANY.

SIR,—In the *Railway Chronicle* of Saturday last, an article appears, alluding to the Asturian Mines, in which, amongst other matters, it is stated, that "the calls made by the directors, *we know*, have not been met by the shareholders with that readiness which would have enabled them to display, to a greater extent, the value of the mines." From the manner in which this phrase is worded, it would appear that the Editor there offers his own opinion; and as I may, perhaps, have other sources of information, I request you will allow me to make a few remarks on this particular, as well as on other points, connected with the mines, in your Journal, in reply thereto.

An attendance at most of the meetings of the company, at which I have heard the reports read, and the facts which have been brought to light by the discussions on them, have convinced me, that the very natural and reasonable reluctance to pay calls, is the necessary consequence of a continued series of magnificent promises, invariably followed by confessions of complete, or of partial, failures. When shareholders, after having contributed a capital of about 130,000*l*. to 140,000*l*., instead of receiving a dividend, are informed, that many thousand pounds have been thrown away in constructing a road (not the Royal North of Spain Railway, but one of the same ruinous character), for the purpose of conveying ore from a mine, which, instead of producing iron, is not only worthless, but destructive to the furnace in which it was ignorantly attempted to work it; and, when a miscalled balance-sheet is presented to them, in which, by the ingenuity of an accountant, assets, or *dissolving views* of them, to an amount of from 6000*l* to 7000*l*., are displayed, which, after inspection and investigation by one of those present, it is confessed (as reported in several of the papers of the following evening) that there is, in fact, a deficiency of about 17,000*l*.; and when shares on which 12*l*. have been paid, and another call of 1*l*. due in a few days, are sold at from 30s. to 35s.; and when there is still a liability to be called upon to advance 7*l*. per share more—I ask, is it to be at all wondered at, that the calls are left unpaid, and shares allowed to be forfeited? The statement that no further calls will be made was repudiated at the last meeting, and it is not easy to conceive by what other means the deficit of 17,000*l*.—which was the amount in April last, and which may now be larger—can be liquidated. Indeed, my opinion is, that as long as 1*l*. can be drawn from the pockets of the shareholders, that 1*l*. will be called for, and that call enforced.—DETECTOR: *July* 27.

ANTIMONY AND SILVER-LEAD MINING COMPANY.

SIR,—I am happy to learn, from Mr. Bartlett's letter in your last, that this new undertaking is holding out such flattering prospects. I am still of the same opinion, that we are to look principally to the silver-lead ores *for returns*, and not to the "pockets" of antimony. This, perhaps, is the cause why the mine captain has observed so much silence of late on this subject. Mr. Bartlett does not appear to be aware, that shares in this company have been, and still are, publicly offered for sale at 5*l*., otherwise he would not have made such a positive negative reply. I cast no reflections on the management—Mr. Bartlett or the directors cannot enrich the contents of the mine to suit our wishes; I simply desire that the proceedings in the mine be regularly reported, as it is not always convenient to call at the office; and as it is the *captains* report I require for my government, and not loose opinions, it is not necessary to give trouble by too frequent inquiry at the office.—A SHAREHOLDER: *City, July* 27.

THE ANTIMONY AND OLD TREBURGET MINES.

SIR,—In the *Mining Journal* of last week it is stated, that the lodes of the Antimony Mine are parallel to the Treburget Mine, on which foundation it is calculated that they will be equally productive. Now, Sir, I know, from long experience, of the existence of parallel lodes, and rich bunches of ore, in east and west lodes; but I have never yet known of such a thing in north and south lodes—it is contrary to Nature; and I should like to know, what have the Antimony and Silver-lead lodes to do with Old Treburget? It is a different channel of ground altogether; and the same false conclusions have been made here as there have been made in the Ashburton, compared to the Devon Consols, pointed out by your intelligent and practical correspondent of Tavistock, in your last Journal. If they take my advice, they will not waste time with shallow adits, but push down the shaft as quick as possible; because, if they do any good, it will be in depth in their silver-lead; and I recommend them to be guided by the ground and the shoots of ore in the Wheal Sarah, and not by Treburget.—AN OLD MINER: *Cornwall, July* 26.

WHEAL VINCENT.

SIR,—The lode in the deep adit is much improved since last report; it is now 2 ft. wide, all of which is good stamps work. The weather has been very unfavourable this last week for our surface operations; however, it appears now to be somewhat settled for a little fine weather, and I hope to get on with our engine-shaft with all speed. We have two men clearing up an old working made by the ancients, on the south lode, where we found some excellent stones of tin in the rubbish; the lode is taken away so far as we have cleared up; we hope to see the bottom in a day or two. In driving north, to cut the south lode, the ground is still favourable for driving, and water still increasing.

I see, in your valuable paper of last week, and also the week previous, letters headed "South Wheal Betsey," and "Practical Mining;" and, as the question of your "Subscriber" is fairly asked, respecting the locality the lodes are running in, I feel it my duty to give a full detail in your next week's paper. I beg also to state, that I shall make a few brief remarks, showing why I am positive that a north and south lode cannot be completely hove by an east and west one.—J. SPARGO: *Downgate, July* 27.

GALVANISED IRON COMPANY.—The directors have issued circulars to their correspondents, to the effect, that—"By virtue of the company's Act of Parliament, which has now received the Royal Assent, the future operations of the company will be carried on under the style, or firm, of the 'Galvanised Iron Company,' as provided by the said Act, and not, as heretofore, under the style of Malins and Rawlinsons; it is, therefore, requested that all communications may be addressed to, and bills drawn upon, the 'Galvanised Iron Company.'"

On the Winning and Working of Collieries.

BY MATTHIAS DUNN, MINING ENGINEER.

No. XII.—*Continued from the Mining Journal of the 8th July.*

Sinking.—This is effected partly by hacks, mauls, and wedges; but the hard strata is blasted with gunpowder, according to the following process:—A hole 1½ or 2 in. in diameter is drilled to the depth of 2 or 3 ft., and then a charge of gunpowder, 5 or 6 in. long, is inserted; the powder is folded up in brown paper, which for damp holes is smeared with pitch; the charge is then perforated with the pricker, around which the upper part of the hole is firmly stamped up with dust or soft mine debris; the pricker is then withdrawn, and a straw filled with gunpowder substituted, which is fired off by means of a piece of candle, set at such a distance as to allow the men time to come to the surface until after the explosion. As the delay occasioned by the ascending and descending of the men in deep sinkings becomes very serious, a practice has recently been adopted of providing a moveable iron hut, which remains at the bottom of the pit, and into which the sinkers retire whilst the blast is exploding. When the strata is dry, this mode of blasting is the most ready and efficacious; but, when wet it is impracticable, inasmuch as the powder becomes damp before it can be fired. In this case great relief is afforded by tin cartridges, which consist of a tin case for enclosing the powder charge, having a small tube reaching to the top of the hole down which the lighted straw runs to the charge; but, under this application, the powder is very ineffective, arising from the loose state in which it is exploded, and the impracticability of stemming the lode. The latest improvement in this department of mining, is the patent fuze of Bickford, Smith, and Co., consisting of a water-tight cord, having in the centre a core of gunpowder, which answers every purpose of a charged straw, whilst it will explode a charge of gunpowder at any distance under water. In the using of this device, the charge must be enclosed in paper or cloth well saturated with heated pitch or tar, and then the patent fuze inserted ready for lighting. Another advantage that belongs to this fuze is, that the time required for running to the charge can be regulated to the greatest nicety, so as to enable the workmen to preserve themselves from the danger which always attends ordinary blasting, especially in hard rocks, where the charges are necessarily heavy, and the stones are projected to a great distance. The cost of the patent fuze is about 6d. for 22 yards in length; it is seldom used for coal blasting, but is invaluable for the blasting of hard rocks, or with heavy charges in quarries of stone or limestone.

The profession of a sinker is dangerous and slavish, yet miners are always to be had in great plenty for such service. The ordinary hours below are four or six, and two shifts per day at 2s. or 2s. 3d., so that ordinary workmen will earn their 4s. or 5s. per day; besides, it opens a way for future promotion, by exercising their courage and ingenuity, and inspiring them with the desire for improvement.

Hitherto our description has only had reference to a single set of pumps, for in a practical sense it is desirable that each column should not exceed 30 or 40 fms.; but, in deep shafts it is necessary to provide a landing place, on which to fix the standing set, whilst another column of pumps is hung for sinking, the water of which is to be delivered into and supply the said fixed set which in turn delivers it to the surface. In order to effect this, it is necessary to affix a cistern at a convenient position in the shaft, which is generally selected where some coal bed or soft strata intervenes. The cistern is placed upon a strong beam, which is thrown across a portion of the shaft, and in which is placed the windbore of the upper set of pumps. The windbore and working barrel of the sinking set are then attached to the ground spears, with hogger pump serving into the cistern, and the same process is pursued as before described, the additional spears or pump-rods being attached to a portion of the Y of the engine, or to the main pump-rod. The length of each column of pumps is greatly governed by circumstances—such, for instance, as the expected depth of the shaft, the facility or otherwise of affixing the cistern; for, as it is necessary to have a recess, it is exceedingly inconvenient to apply a cistern where the shaft requires to be tubbed; it, therefore, frequently becomes matter of necessity that a column of pumps be extended far beyond any agreeable or economical length; for, when the pressure becomes excessive, the destruction to buckets and clacks becomes serious, and the speed of the engine is necessarily slackened, on account of the shock which takes place at each return stroke; therefore, from 35 to 40 fms. is considered the extent of economical application, although instances may be found in which 60 or 70 fms. are in work. These cisterns are sometimes made of wood, sometimes of iron, and not unfrequently in excavations of the strata, especially if a seam of coal, however thin, can be made subservient.

I need hardly repeat that, according to the depth of the shaft, column after column of pumps are added, each succeeding set becoming in its turn a standing set, and the hanging apparatus transferred to the next sinking set, till all be accomplished to the bottom of the pit. As small feeders of water are found exuding from the rock, or other parts of the shaft, which cannot be enclosed in any tub, they are collected together by means of horizontal recesses, or grooves cut in the shaft, from which they are led to the sump, or into one of the above-named cisterns, by means of boxes or pipes; so that, in a well arranged pit, though it be 100 fms. in depth, the waters being partly tubbed and partly collected as above mentioned, will be perfectly dry and comfortable, although the engine be also working with three or four columns of pumps. I might here mention, that if any waters are met with at a distance within 10 or 20 fms. of the coal, they are not tubbed off, because in the working of the pillars the stratification is expected to be broken, and these waters let down; but not so with water situated 30 or 40 fms. above the coal; unless the strata be peculiar, and the coal very thick, that water will scarcely be let down even by the working of the pillars.

In the drainage, when sinking a shaft by means of pumping, many difficulties occur; for it is requisite that the water be drained as low as possible, to enable the sinkers to prosecute their work; but if it so happen that the speed of the engine at all exceeds the growth of water, the snore holes will become dry, and draw air as well as water, which immediately causes a violent derangement of the equilibrium of the engine, and is attended (especially in heavy engines) with great danger. To obviate this, the lower part of the windbore, which rests upon the bottom, is perforated with a number of circular holes, for the purpose of being more or less plugged with wood; but the grand safeguard, and which is an invaluable addendum to mine engineering, is the regulation of the steam-valve of the engine, by means of catrakes, which were first introduced by Bolton and Watt, and consist of a pair of cisterns containing water, and fitted with plugs or valves, so contrived, by means of adjusting screws, as to discharge the water at any given rate desired by the engineer. As soon as the water has discharged so far, rods, connected with these valves, and with the spanners of the working gear, so operate upon the steam-valves of the engine as to regulate its speed from half-a-stroke per minute up to its maximum extent. These catrakes are made sometimes to work by means of steam, applied to small cylinders, with regulating cocks; but they are more complex, and far inferior to the water catrake of Bolton & Watt.

The working of the pumps is frequently interrupted by gags of wood, by the oakum used in blasting, and by the wearing of buckets and clacks in consequence of the sandy state of the water, as well as by various indescribable accidents and breakages, so that the most watchful care is demanded from every person concerned. In proportion also as the pit deepens, so must the balances of the pumping apparatus be adjusted, the pumps and spears closely collared, to prevent as much as possible the vibration occasioned by the movement of such heavy bodies; and spare gearing of all sorts should be kept in readiness to provide against accidents.

[*To be continued in the Mining Journal of next week.*]

APPLICATION OF STEAM TO RAISING WEIGHTS.—We find that at the Hetton Colliery the engine employed there for drawing coal to the surface from a depth of 490 yards, raised in 45 seconds no less than 4800 lbs., being two corves, each holding 30 bushels, calculating the weight per bushel at 80 lbs.—this is exclusive of the weight of the corves, rope, &c. The rope employed is 8 to 9 in. wide, and 1½ to 2 in. in thickness; it will thus be seen, that upwards of 2 tons weight is raised in three-quarters of a minute, and allowing 15 seconds for change, this would give an output of no less than 1840 tons from one pit in the 12 hours, from a depth of 245 fms. The advantages alone, in a pecuniary point of view, must be at once apparent, from the application of machinery, and the rapid progress made in the increase of power acquired, and the economy of time and money.

NATURE'S GAS WORKS.—An immense volume of natural gas, sufficient for the supply of a city, was discovered a few days since, near Detroit, Michigan, by the Messrs. Granger, while boring a 4-inch shaft for water. At a depth of 70 feet they struck a vein or cavity, from which issued a violent current of air, which threw up stones as large as hen's eggs, 10 or 15 feet high, accompanied by a volume of water, rising 10 or 12 feet. On applying a light to the air, it burnt furiously, the flames rising 20 feet. It is proposed to conduct this gas in pipes to Detroit, and light that city with it.—*New York Sun.*

THE FRENCH METAL TRADE, AND GENERAL COMMERCE.

The comparative return issued by the administration of the French customs on the imports and exports of France during the first six months of the year 1848, as compared with the returns of the years 1846 and 1847, has just been published, and, we regret to find, shows no improvement of any kind in the commercial and manufacturing position of the country; indeed, the importation of the raw material used in manufactures exhibits a material diminution. What must be the position, for instance, of the manufacturers of furniture—a very important branch of trade in Paris—when we find that mahogany, of which there was imported in June, 1846, 4234 metrical quintals, and in 1847, 3464 met. quin., has dwindled down, in 1848, to 50 met. quin.? In every other trade the case is the same. In copper, matters are woful. The quantity imported in June, 1846, was 8908 quintals; in 1847, 9024 quintals; and in 1848, but 585 quintals. Tin has fallen from 1341 quintals in June, 1846, to 585 quintals in June, 1848; cast-iron, from 85,166 to 31,854 quintals; coals, from 507,009 to 355,476 quintals; lead, from 20,488 to 6964 quintals; zinc, from 7970 quintals in June, 1846, and 19,941 in June, 1847, to 1974 quintals in June, 1848; and so on, for other articles. One of the articles in which there is a great fall, is that of olive oil; it has fallen from 32,218 quintals in June, 1846, and 24,976 in June, 1847, to 14,514 quintals in June, 1848. This article is of such universal necessity in France, both as an ingredient in food, and also for the purposes of industry, that its diminution to so great an extent is universally allowed to be the best proof of the great distress existing in the country. England has partaken largely in this diminution. Of the productions of English origin which have suffered most, copper is the most remarkable. The quantity of copper imported from England, and cleared for home consumption in France, was, in June, 1846, 4280 quintals; in June, 1847, 5312 quintals; and in June, 1848, 31 quintals. Linen and flaxen yarn has diminished from 1366 quintals in June, 1846, to 53 quintals in 1848; cast-iron, from 41,962 quintals in June, 1846, to 6979 quintals in 1848; coals from 475,288 to 297,178 quintals; and linen cloths from 115 to 2 quintals. As the clearest view of the state of the trade will be got from the amount of the duties received upon the whole importation, we subjoin a return of the receipts for the first six months of 1848, as compared with the same period of 1846 and 1847, and for the month of June, 1848, as compared with June, 1846 and 1847. The following is from a return of the duties received on the principal articles imported into France in the course of the first six months of 1848, with comparative returns for 1846 and 1847:—

	1846.	1847.	1848.
Copper, first fusion	£ 54,209	£ 98,407	£ 27,614
Tin	8,664	7,758	6,123
Cast-iron	2,462,506	2,818,819	1,553,873
Coals	2,291,652	2,411,102	1,667,034
Nitrate of potass	138,303	86,026	3,141
,, soda	106,937	55,777	8,652
Lead	439,226	402,308	338,947
Zinc	35,208	40,986	22,592
The total for 6 months shows	£74,676,750	£65,956,675	£38,150,854

The following is from a return of the duties received in the month of June, 1848, with comparative returns for June, 1846, and June, 1847:—

	1846.	1847.	1848.
Copper, first fusion	£ 13,356	£ 17,999	£ 230
Tin	1,452	2,957	774
Cast-iron	516,421	542,574	163,474
Coals	507,009	527,638	355,476
Nitrate of potass	20,995	2,375	239
,, soda	23,181	15,912	645
Lead, in block	115,088	95,783	38,745
Zinc	8,320	5,176	3,290
The totals show	£12,612,579	£11,180,163	£5,890,632

The receipts on the Belgian railways, during the past month, as well as during the last half-year, exhibit a great falling off. The returns for the past six months, of all the companies, give below 34,500,000 francs, against about 36,000,000 francs last year, the decrease being 1,400,000 francs. During the last month the receipts had been 942,119 fr., being a decrease of 142,022 fr. on the return of May, and a decline of as much as 245,434 fr. on the amount received in June, 1847. The receipts of the railway between Antwerp and Ghent had been only 25,668 fr. last month. By a financial statement just published, it appears that the direct taxes in Belgium amount to 12,967,876 fr. for the first six months of 1848, against 11,941,593 fr. for the same period of last year; and the indirect taxes, for the same time, amount, in 1848, to 34,416,432 fr., against 35,824,611 fr.; the diminution in the latter is attributable to the French revolution and the commotions in Germany, and not to causes likely to have a permanent operation.

MINING IN FRANCE.—We stated, in last Journal, that mining operations in France were assuming a more cheerful aspect; this week a decided improvement has taken place at St. Dizier, St. Etienne, the Chatellonais, and other iron districts, as well as in the coal basins of the Loire, Rive de Gier, Grand' Combe, Alais, Danzin, &c., where the greater portion of the colliers are in work. At Lyons, Rouen, St. Quentin, Elbœuf, Sedan, Cambrai, Valenciennes, and large manufacturing cities, the factories which have, for the last few months, been nearly at a standstill, are resuming their former activity; but the scarcity of money is severely felt throughout the whole of the industrial departments. Mining adventurers are now feeling more confidence in their enterprises, as the Minister of Public Works has announced to them, that the present Government has not the least intention of interfering with mining industry, or speculation; and that it was only in case of those parties who had concessions of mines not being able to continue the workings from want of funds, that a project had been contemplated, on the part of the late administration, to have made a purchase of the plant, or material, by the Minister of Public Works, so as to have kept the mining operatives in employ, and carried it on at the expense of the state. This is somewhat consoling to them, as great fear existed that the sudden change in political events would have been most prejudicial, indeed ruinous, to all their contemplated projects, should the Government have attempted *exappropriation* of mining property, the same as was set forth respecting their intentions regarding railways—although the latter would, no doubt, have been beneficial to the directors and shareholders of many of the unpaying and unfinished lines, which are nearly in a state of irretrievable insolvency from the want of funds, and the general depression in railway property and speculation, which the recent crisis has tended greatly to enhance, as those who have money take care to keep it, and not embark in adventurous investments. The Government has contracted for a loan of 8,000,000*l.*, a large portion of which will be appropriated in giving employment to the working classes. The directors of the Bank of France, and several of the most extensive mining proprietors, have come to terms for the advances they may require, at a low interest, under the existing critical state of metallurgic operations in the mineral districts. It is due to the present energetic Government to state, that it is doing everything it possibly can to restore France to a prosperous position, and to increase her commercial intercourse with other nations.

MINING IN BELGIUM.—The furnaces and foundries in the province of Liege are now chiefly in full work; and the promising state of affairs in Germany, and the north of Europe, gives great hope that the exports will soon make good the depression prevailing in all the mining districts for the last six months.

MINING IN SOUTH AUSTRALIA.—A late number of the *Sydney Chronicle*, in some remarks upon the state and prospects of mines and mining operations, gives some very sensible advice regarding the relative importance of mineral wealth, and the necessity of not neglecting the other sources of prosperity. On mines, it observes:—"We have already said that the mineral wealth of these colonies ought to be taken advantage of; but, if the country is to benefit by it, the other sources of prosperity inherent in the land must meet with an equal encouragement, and must not be neglected in the golden dreams of rapidly-acquired wealth, which the mania for mining, like the treasure-hunting schemes of old, is but too apt to engender. If a due proportion only of our capital is vested in mining operations, the creation of this new export cannot fail to be benefical to the community; but if capital is invested to such an extent as to withdraw it from the enterprises upon which the colony has hitherto depended—such as the production of wool, tallow, or grain—the result will be injurious to the community in an extent corresponding to the amount of such reduction, as it will have the effect of substituting an uncertain for a certain source of wealth, and of staying the march of improvement in the social welfare of the people."

IMPORTS AND EXPORTS OF IRON AND UNWROUGHT STEEL.—The total quantity of foreign iron ore imported in the year ending April 5, 1848, was 21 tons; chromate of iron, 1797 tons; pig-iron, 473 tons; iron bars (unwrought), 33,371 tons; bloom iron, 904 tons; rod iron, 3 tons; broken iron, 310 tons; iron hoops, 12 tons; cast-iron, 41 tons; unwrought steel, 654 tons; and steel scraps, 36 tons. The declared value of wrought-iron and steel imported amounted to 23,510*l.* The total quantity of foreign bar-iron exported was 5053 tons; unwrought steel, 667 tons. The total quantity of British pig-iron exported, within the same period, was 176,086 tons; bar-iron, 214,874 tons; bolt and rod-iron, 13,419 tons; cast-iron, 26,321 tons; wire, 1972 tons; anchors, grapnels, &c., 4561 tons; hoops, 17,163 tons; nails, 5735 tons; other sorts of wrought-iron, 74,036 tons; old iron, 5751 tons; unwrought steel, 9786 tons. Our principal customers for British iron and steel are Prussia, Holland, France, and the United States of America—the latter more especially. The total quantity of British hardwares and cutlery exported from the United Kingdom in the year 1847, amounted to 20,614 tons—the declared value of which, 2,341,980*l.* 11s. 1d. The British machinery and millwork exported within the same period amounted in value to 1,263,015*l.* 10s. 4d.—of this amount Russia paid 226,635*l.* 19s.; the Hanseatic towns, 151,665*l.* 2s.; Spain, 97,527*l.*; Italy, 108,888*l.* 19s. 2d.; British territories in the East Indies, 148,645*l.* 15s.; the British West Indies, 52,290*l.* 4s. 6d.

IMPROVEMENTS IN THE MANUFACTURE OF IRON.

A short time since we published a communication from the American correspondent of the *Birmingham Journal*, wherein mention was made of an invention connected with the manufacture of iron, which was creating very considerable interest among parties interested in the iron trade of that country. The same authority, in a subsequent letter, gives the following additional particulars:—

From the Report of the Commissioners of Patents, I condense the following facts, which may not be without interest to those of your readers who are engaged in manufactures. There were two patents granted in 1847 for obtaining iron from the ores. The first is for reducing ores in the ordinary cupola furnaces, and consists of little else than the addition of a constant jet of steam upon the mass, while undergoing the ordinary process in such furnaces. The other is for producing malleable bar-iron directly from the ore. The process and apparatus now in use in bloomeries are attended with many disadvantages. The forge fire is such that all the ore and other materials for the loup cannot be placed upon it at once; but as large a mass as can be accommodated is placed upon the fire—and as the impurities are driven off, and the mass diminishes, other portions of the ore, &c., are added; and this is repeated until the loup is prepared for the hammer. In this process, as the forge is open on all sides, the outside of the mass is constantly exposed to the atmosphere, which cools and retards the process, wasting time and fuel at the same time; and the addition of cold fresh materials produces the same effect. Thus it is evident that those portions of the ore which were earliest placed on the fire are kept there longer than is necessary, and are in danger of receiving injury therefrom, and the incongruous mass is with difficulty brought into the same condition, and prepared for the hammer. To obviate this, the patentee prepares a close chamber for the reception of the charge, of sufficient size to receive the whole charge at once; the upper part of the charge is supported in some degree by moveable bars extending across the chamber; and there are suitable doors, which may be opened when necessary, for the reception of the charge, for the working of the loup, and for removing it when ready for the hammer. When the loup is nearly reduced, a new charge may be introduced, and made to rest upon the bars above-mentioned, so as to receive all the benefit derivable from the heat which would otherwise be lost. These improvements are said to be in successful operation, effecting a great saving of time and fuel, increasing the quantity, and improving the quality of the iron.

A patent has been granted for improved machinery for twisting and rolling iron into bars. The following extract from the application of the patentee explains its use and process:—"In the manufacture of iron, either by rolling or hammering, the fibres are all drawn longitudinally, which, for the rails of railroads, for the tires of railroad wheels, and a variety of other purposes, renders it liable to break off in thin leaves or scales, or to split lengthwise—this state of things being common in the two instances specified. The object of my invention is to treat the iron, either in the original manufacture thereof, or afterwards, as to avoid this defect, and thereby render the iron for these purposes more durable, by laying the fibres in such form and direction as to prevent it from scaling off or splitting; and my invention consists in twisting the iron in, or before, or after the operation of rolling or hammering, so that the fibres shall wind around one another, in manner somewhat similar to the fibres of hemp in a twisted rope or strand. And the second part of my invention relates to the machinery by which I carry into effect my improved process, and consists in combining two or more sets of rollers, one or both of which are to be draw rollers, and one set turning in the usual permanent bearings, and the other set or sets working in a frame or chuck that rotates on an axis at right angles to the axis of the rollers, to twist the bar of iron between the two sets of rollers. To enable any one skilled in the art to apply my improved process of treating iron, and to construct and use the machine which I have invented, therefore, I will describe the mode of procedure which I have essayed, as well as the manner of constructing and using the machine therefore. The bloom of iron, or a bar previously formed, is taken while in a heated state, and twisted while undergoing the operation of hammering, which may be done by securing one end of the bloom or bar in a clamp, and rotating it while the hammer rests on the other end, or by securing the two ends in separate clamps, and turning one of them, or both, in opposite directions, until the required twist has been given, and then subjecting it to the operation of hammering. But when the bar is to be drawn by rolling, it is to undergo the operation of twisting while passing between the rollers, or after it has passed between one set, and before it passes between the second set. And when it is twisted on its way to the rollers, one end of the bar may be secured to a clamp, which is to be rotated as the bar passes between the draw rollers. As the bars thus prepared are in most instances to be reworked to receive the required form or forms, according to the purposes to which they are to be applied, it will be evident that they may be twisted as they pass from the hammer or the rollers, instead of giving the twist before the hammering or rolling; and to effect this the end of the bar may be clamped as it leaves the hammer or rollers, and the required twist given; but it is better to give the twist before the iron has undergone the operation of rolling or hammering, as it is then more highly heated, and the fibres will not be so severely strained as they would be after the metal has been partly cooled. When iron has been treated and worked according to this process, the fibres instead of running in the bar longitudinally in straight lines, will run in the direction of a helix, gradually approaching to a straight line from the circumference to the axis of the bar—so that, when used for making tires, or for other analagous purposes, the bar will be prevented from splitting along its length by the tenacity of the fibres which cross the bar in the direction of a helix, instead of the mere adhesion of the fibres together; and when used for the rails of railroads, or similar purposes, none of the fibres can be separated from the mass longitudinally, as heretofore, nor can the iron be stripped off in scales until the fibres have been cut off on each side—for by their direction they pass diagonally from one side over the surface and down the other side, whereby they are completely tied together."

Letters patent have also been granted for forming pen barrels by drawing—a process similar to that of making wire. There are several other patents noticed in the report, for improvements in trip hammer tools, metallic pipes, and other articles common to your neighbourhood, which it would be difficult to explain without plates.

The quantity of manufactured iron and steel imported into the United States during the last fiscal year, was not far from 65,000 tons, as follows:—

Wire	*Lbs.*	92,064
Nails, screws, and spikes		750,302
Cables		2,292,192
Wrought, for locomotives and engines		52,855
Malleable		17,599
Saws		4,348
Anchors		28,202
Anvils		1,268,440
Blacksmiths' hammers and sledges		103,403
Castings		962,660
Hollow ware, rad irons, and hinges		970,143
Axletrees, nail rods, &c.		371,932
Sheet and hoop iron		5,974,960
Pigs	*Cwts.*	474,147
Scrap		27,868
Bar		582,685
Steel		89,757

The above was valued at $3,627,313.

SOUTH WALES IRON TRADE—PRESENTATION OF PLATE TO MR. HOMFRAY.—In our Journal of the 18th March, we gave a description of a handsome testimonial, which was to be presented to Samuel Homfray, Esq., by the iron-masters of South Wales, as an acknowledgment of his ability and courtesy in presiding as chairman of their meetings. The presentation took place on Thursday last, but as the particulars only reached us this morning, we are compelled to postpone a more detailed notice until our next.

PONTYPOOL SMALL DEBTS COURT—RICHARD BUDGIN, IRONFOUNDER, *v.* HENRY ADCOCK, C.E.—This was an action on a bill of exchange for 19*l.* odd, for castings and machinery, supplied for the recent trial of defendant's patent spray pump, at Mr. Blewitt's, M.P., pit, at Llanhilleth. Affidavit was put in of service of notice of trial at the defendant's residence, Northumberland-street, Strand. His honour decided this to be not sufficient service, but allowed a fresh summons to be issued for the next court day.

VALUE OF MINERAL PROPERTY.—Mr. Cliffe says—"Mineral property on the hills, which, when the Monmouthshire Canal and its tramroads were constructed, was only worth 5*s.* an acre surface rent, soon increased in value to 1500*l.* an acre, or more, underground. The area of the Monmouthshire coal field exceeds 89,000 acres, and the various seams of coal that can be profitably worked are said to average about 50 feet, which produce a gross yield per acre of nearly 73,000 tons. The total quantity now worked annually is estimated at about 2,200,000 tons, at which rate there is a sufficient supply left for the next 1500 years. The net quantity available for export has been estimated at about 3,000,000,000 tons. Great Britain now annually consumes from all her collieries about 21,000,000 tons."

VALUE OF LABOUR IN AUSTRALIA.—A private letter, dated Sydney, Feb. 29, says:—"The last ship of emigrants were hired for the year at from 28*l.* to 30*l.*, single men; from 16*l.* to 25*l.*, single women; from 36*l.* to 45*l.*, married couples, besides food and lodging. You never saw anything like the rush that was made to secure them. The anxiety for a prize number in the lottery was not to be compared to it."

HOW TO HARDEN GYPSUM.—It is known that calcined gypsum, after being moistened with a solution of alum and again burnt, acquires much greater hardness and solidity. M. Kreating recommends for the same purpose a solution of 1 lb. of borax in 9 lbs. of water, which is poured over the calcined fragments of gypsum. They are then kept at a strong red heat for six hours, ground to a powder and worked. The effect is said to be still better if a pound of tartar and twice the quantity of water are added to the solution.—*Liebig's Annalen.*

Original Correspondence.

IMPORTANT DISCOVERY—NEW PROPERTY OF COKE.

SIR,—Having just read in your Journal of the 22d some observations on the interesting experiments of M. Jacquelain, in reference to the conversion of diamond into coke, it occurs to me, that it may be interesting to some of your readers to be made aware of a discovery in close connection with this subject, which I made several years ago, and which Professor Faraday has done me the honour to communicate to the Royal Institution. The grand distinction between the discovery of M. Jacquelain and mine is simply this, that while he discovers that diamond can be made into coke, I had long since discovered that *coke was diamond*; in as far as that coke is possessed of one of the most *useful* and remarkable properties of diamond in respect to its power of *cutting* glass, owing, doubtless, to the extreme hardness of its ultimate particles, or minute crystals of which a mass of coke is found. We are apt to consider coke as a soft substance, because we can crush it, and pulverise it with facility; but if we examine into the actual hardness of the minute, plate-formed, crystals, which compose a mass of that substance, we shall find that they are possessed of a most remarkable degree of hardness, and can *cut* glass with that clean-looking cut which is so peculiar to the diamond. I use the term *cut* with all due consideration, in contra-distinction to the scratching property which is possessed by all substances harder than glass; but it will be found that coke does not scratch, but really and truly *cuts* the glass, which any of your readers may prove, by taking a small fragment of coke, and switching it at random, across and across, a pane of glass while the sun is shining through it, which will render the beautifully clear, diamond-like cuts more distinct; they will be found to penetrate pretty deep into the body of the glass, and give forth most beautiful prismatic colours, as the light of the sun falls on them. So far this may be all very pretty and interesting, as tending to still further identify the diamond with carbon; but, as I always like to have an eye to the practical application of scientific discovery, I am anxious to make these facts known to your readers, so as, together with the following remarks, they may, peradventure, turn this discovery to some useful application; for, although I do not expect to see our glaziers using a cinder to cut the glass for the repair of broken windows, in lieu of a chip of the queen of gems, yet I cannot but feel certain that, when the extreme diamond-like hardness of coke is made known, that the fact will be laid hold of, and turned to good account as a most cheap material for all grinding purposes, such as required for many processes in the arts—to say nothing of its useful application to the sharpening of a razor, as a very superior strop powder, for which purpose, however, the coke must be reduced by *evigation* to the most minute and impalpable powder. I shall leave the matter of application in the hands of your readers, now they are made aware of the fact which I have endeavoured to communicate to them.

Bridgewater Foundry, Patricroft, near Manchester, July 24. JAMES NASMYTH.

THE IRON TRADE.

SIR,—It may not, perhaps, be known to you, that one of the consequences of the number of iron-works now laid off work by the present low prices and want of demand, preventing the production, except at a heavy loss of capital, is this—the emigration of large numbers of the best workmen, especially puddlers, to America, in the hope of finding regular work there. The result of this will be, that as the number of men skilled in iron-making is very limited, when the time arrives that iron is again in demand, the men to make it cannot be found; it requires years of bringing up before that class of men is produced; those who remain will get enormous wages while the briskness lasts, the cost of production will be greatly enhanced, and the article will not be obtainable, except at very disadvantageous prices, which will do infinite harm both to men, masters, and consumers of iron. This is the main evil of laws enacted to make money fluctuate in value; cheapness in the time of scarce money, which ruins the producer, followed by unnatural dearness in the time of good trade, which is nearly as bad. AN IRON MERCHANT AND MANUFACTURER.

Newcastle-on-Tyne, July 24.

BORING BY STEAM

SIR,—Many thanks to Mr. Wilkins for his *charitable* suggestion, that my borer is an importation from China. I assure him I have never been either in India or China, nor have I the pleasure of knowing any one who has; and further, that it is *not* an importation. If my borer *is* like that so successfully used by the Chinese, I can only say, I am happy to have Mr Wilkins's testimony to the value of the invention. However, as I suppose the public care little whether an invention is imported, or indigenous, provided it is useful, I am at a loss for the object of Mr. Wilkins's letter.

Calstock, July 25. W. G. GARD.

SHEATHING COPPER.

SIR,—I am glad to find the smelter take more notice of my communications on this subject than the consumer (to whom my first was addressed), and am willing to hope they may be induced to enter more fully into the spirit of the investigation. Meanwhile, let me say to the first of your smelting correspondents, that it is not so much to inquire what degree of simplicity is possible (if, indeed, that be the case with the process stated by him), as, in actual practice, what conveniences and inconveniences in working, and what effects upon the products, attend the changes made, and the differences in detail in the different works. For instance, his statement, that the making of pure copper is the business only of the refiner, is inconsistent with the theory laid down in my last, and will probably be found so in practice—for the purer the copper goes into the refining furnance, the purer, of course, will be the refinery slag, and the less its contaminating influence on the pool of metal beneath; and it will take no little trouble to remove the slag so completely, as to do away all danger of such influence, particularly in the case of overpoling. The second, I beg to understand, that I ask no secrets (if there are any, after Mr. Vivian's liberal exposition in 1823, and the details given since that time by Lampadius, Dumas, the cyclopædias, and Ure's *Mining Dictionary*, of the process in this country, Germany, France, and Norway), but merely that sort of open comparison between the modification and differences of different times and houses, which, with chemical reasoning and laboratory experiments, may lead, in copper smelting (as it has done in many other arts), to improvement and economy in all. Our case is a complaint, become very general, of an actual falling off in the quality of the product; and the *sole* object of my communication is to disprove this, or to remedy it, at the least cost and inconvenience to the smelter. If your smelting correspondents will aid in this, by pointing out the supposed advantages, or inconveniences, of the respective modifications, or differences, in detail, of different times and houses, my own share (according to my ability) shall not be wanting; and what needs be more open than my last? But laboratory experiments are of comparatively little value in chemistry of the arts, unless in connection with the practical working; and, in this way, I intend such information, as may appear useful to the smelter, to follow the course of the discussion. Privately I can, probably, get any information required; but that is not the purpose, which is to bring into comparison and collision the opinions, as well as experience, of different smelters, on the points above specified, assisted by the reasoning and experiments of chemical science, with a view to general progress and improvement.

July 25. J. PRIDEAUX.

COPPER SMELTING.

SIR,—Although unwilling, at the present time, to enter into any public discussion, I think it necessary to send a short reply to some letters, which appeared in the *Mining Journal* of last week, on the subject of copper smelting. "A Smelter and Refiner" observes—"That in the treatment of sulphurets of copper there should be one calcining, one roasting, one smelting, and one refining—four operations in all; and that care be taken that no iron tools be used, except the ladles for the refining process." The reason why iron tools may be used for refined copper without detriment, while they are found injurious to the impure metal, is because sulphur being present in the latter, and iron having a stronger attraction, or affinity, for it than copper has, a small portion of the iron becomes combined with, and dissolved by, the sulphur; the metal, therefore, instead of being simply contaminated with sulphur, acquires iron also. If my plan were adopted, of supplying to the raw ore a sufficient quantity of pure iron to take up the whole of the sulphur present, these would pass off entirely with the slag, and leave the copper free from sulphur. "A Smelter" complains that theoretical men do not communicate their ideas freely to practical men. Now, in the copper smelting trade, when an inventor goes to a smelter, he is certain of meeting with some reply of this sort—"Well, Sir, let us see your plan in operation, and we shall then be able to judge of its merits"—well knowing at the time that none of the other smelters will adopt it, so that the poor wight has no chance of exhibiting his plan,

unless he can start a new work, or company. "A Cornish Miner" may take this as a reply to his letter. I may have an opportunity of showing my plans in operation sooner than the smelters contemplate; they may rest assured that sound principles must ultimately triumph over every opposition.
Llanelly, July 24. T. H. LEIGHTON.

THE COPPER TRADE.

SIR,—Thanking you, with, I believe, all the adventurers in Cornish mines, for your very just and most appropriate and indispensable observations relative to copper companies, whose monopoly is most ruinous, I beg to say that you do not go far enough. You might, I think, safely name 60 per cent. instead of 30, as the profit of the company, which is the largest purchaser in the copper market; the facts speak for themselves. Many years ago that company was established; it was said to support the miners, in consequence of two great rival companies having ceased to oppose one another in the market. You are aware, that the nominal returning charge is 2*l.* 15*s.* per ton of ore; but you may depend upon the fact, the real charge at that time was not more than 25*s.* or 28*s.*, and, since then, the reduced rates of coal, wages, &c., must have decreased it still more. Their surplus copper amounted to 14 per cent.; but lately they have taken to drying the samples of copper ore, which must greatly have increased that per centage. They are not in the habit of insuring—so that, as a loss of a cargo of ore rarely occurs, their insurance account may safely be calculated at 5000*l.* per annum. Moreover, knowing the market, purchasing largely, when prices are low, of poor ore, which affords most smelting profit, and reducing their purchases at high prices, theirs is a certain and *royal* game of pecuniary advantage. I write this merely for your information, that you may inquire for yourself, and do not subscribe my name, which is quite unnecessary, as you can easily verify the facts. You are aware, that the poor miner has no opportunity of bidding at the ticketings to keep up the price, and is obliged to sell at whatever price the purchasers condescend to offer.—A. B.: *Redruth, Feb.* 27.

A terrible change has taken place in the copper trade since the above was written. The poor miner does not get more for his produce than 50*l.* per ton of fine copper, which must leave a heavy loss on all mines not extremely rich, and drive thousands of miners to Australia, or elsewhere. Sir, you cheer us with the prospect of a new copper company. Let the proprietors of it, if such be the case, be on their guard. The present companies have declared that they will contrive to prevent or to put it down. The new company should feel their way, beginning very moderately, whatever be their capital; the actual cost, at the present time, there is every reason to believe, does not exceed 20*s.* for smelting the ton of ore; therefore, a new company should build, or purchase, its works, make its coal contracts, select its localities, &c., in such a prudent and economical manner, choosing, at the same time, honest and *experienced* agents as buyers at the ticketings—no small point, be it observed—that they may set at defiance the terrors of competition, with the great leviathan at its head, who has already, by his energy, determination, and wealth, driven from the field so many rivals in tin and copper. It is clear that the existing companies holding very large stocks, a new company will possess, with its unembarrassed capital, great advantages in coming into stock. The standard of copper ought, in fact, to be made up at the real cost of 20*s.* per ton of ore, not of 2*l.* 15*s.* This would go far to show matters in their true light, and to remedy the evil. When 2*l.* 15*s.* was first charged, it probably approximated to the real cost of smelting; but at present it is a notorious exaggeration, leading only to mystification.—A. B.: *July* 24.

THE SMELTING TRADE.

SIR,—In your Journal of last Saturday there appeared a letter from "A Cornish Miner," in which the writer refers to the fate of the late English Copper Miners' Company, and advises you "to pause, ere you recommend the formation of another company, *for the purpose of smelting.*" It is a fact so well known, that I would not have thought it necessary to allude to it, but for the remark of your correspondent, that the balance-sheet of the above company showed a very large profit upon their smelting business, and that the causes of their failure were speculations in collieries and iron-works, and the erection of most expensive buildings. Had they adhered to their legitimate business they would still have been in existence, and been in a position to pay handsome dividends; and so far from taking the advice of your correspondent to be cautious in recommending the formation of a new smelting company, I think that the Cornish miners ought to be very grateful if you succeed, by your able advocacy, in establishing one. I am of opinion, along with every one versed in the subject to whom I have spoken on the matter, that with proper management such a company would not only prove highly profitable to the shareholders, but would also be the best—FRIEND TO THE CORNISH MINER: *July* 26.

CAST-STEEL.

SIR,—I do not yet know, were I to attempt Mr. R. Mushet's discursive style, what I might be able to perform; meanwhile, "a limited scope of ideas" is very useful in discussing a given subject—for it is more likely we shall understand it if we attend to it. When the matter is understood and expressed, which is a convertible phrase for understanding it clearly, it will be time to enter with Mr. R. Mushet into the school of the philosopher he patronises, who wrote the celebrated treatise, *De omnibus rebus et quibersdam aliis.* I assert that, if the qualities of certain kinds of iron are derived from the alloy of malleable iron—quasi-malleable—this ought to be detected in the fracture. Every species of iron and steel is practically judged by its fracture; and I ask, who can thus detect the malleable iron in the fracture of honeycombed, bright grey, and mottled pig-iron, and high-blown finers' metal? Mr. R. Mushet says, though it cannot be seen, there it is sure enough. Now, this is absolute trifling with the exact requirements of science. The *simile* betwixt invisible gases and a ponderous metal judged of, and bought by its appearance, is ludicrous in the extreme. It would have been difficult to devise any thing more infelicitous for the direct purpose of bringing his argument into contempt. But even as far it goes it is incorrect. Carbonic acid, with proper care, may be *absolutely visible*, when poured into a vessel of atmospheric air; but this is of no consequence—the *simile* being intrinsically absurd. Mr. R. Mushet must have been indeed *in nubibus*, when he abandoned "a limited scope of ideas" to sport such vaporous imaginations. The establishment of this malleable flotilla in pig-iron, would involve a number of singular conclusions. For instance, there could exist no uniformity of substance in castings of much thickness, especially in those moulded vertically; we should have No. 1 pig-iron at the bottom—while the upper region of the bi-form monster would be crowned with malleable iron. Need I crucify practical men with the question, if this consists with experience, or if work is strongest made with mottled or No. 1 iron? After continuing, by assertion, to establish the uniform levity of malleable iron beyond a "full red-heat," Mr. R. Mushet, as usual, contradicts himself, by asserting the maximum expansion; and, therefore, levity is when entering into the solid state. This assertion, which is correct, is at variance with his theory. I never understood there was a difficulty in accounting for this expansion, nor for that of water at the same stage, by the greater space occupied by the crystalline arrangement than the spherical particles of a fluid. Why not give us a table of the specific gravities of malleable iron at all temperatures, up to 170° of Wedgewood? According to the theory, I must again assert, that their ought to be more malleable iron in ordinary finers' metal than in honeycomb pig-iron, and the cells ought progressively to have increased. It is not surprising that a cellular surface should yield more readily before the hammer than a solid substance. It appears, by Mr. R. Mushet's admission, that I was correct in supposing him *not* to have made the experiment he relates; therefore, the manner this experiment was brought forward is the strongest instance in point of that absence of adequate detail I require, and, moreover, of disingenuosness. Did Mr. R. Mushet's father devise and make this experiment to prove the malleable alloy theory; or did he consider that it proved it? Why not give the reasonings and conclusions which originated and followed the experiment? and why appropriate the experiments, or theories, of another? There can be no scientific satisfaction in such piecemeal statements. I have already shown clearly the experiment proves nothing at all for the theory; but it ought to have been advanced in its true colours. However much Mr. R. Mushet may esteem himself as above the study of his father's writings, I must again recommend him to the manner in which that eminent metallurgist laid his details before the public, as worthy to receive a satisfactory account of the objects of his experiment, with the faithful minutiæ of the results, whether they militate for or against his views. What we demand in science is the actual proof of facts or arguments—not the mere assertion of an individual, in an infallible tone, that "he has repeatedly proved them." When we are handed over to MS. volumes, xiii + x, pp. pp., *ad libitum*, of isolated quotations, the business becomes more immensely unsatisfactory.

The magniloquent circumlocution by which Mr. R. Mushet describes the combustion in an air-furnace, appears intended for an example of that "sound and fury signifying nothing," which he says issues from the head of a metalliferous opponent. It is very like the metaphysician's order to change saddles. However, as I have said before, if Mr. R. Mushet claps his pot upon the fuel, he will have it hottest under the bottom; but I prefer mine standing on a brick. I quite admit, that the union of iron and carbon principally takes place before fusion; but how is it that the unfortunate pure iron could not find "one particle of carbon" to unite with in the cementing region of the blast-furnace before it entered into that state? And will not the pure iron kindly consent to float to form honeycombs?

A former discussion on the chemical composition of white iron has nothing to do with my present mention of this crystalline substance as a definite compound. Its crystallised character gives it, whatever the composition, a definite form, compared with the shades of transition intervening betwixt this and highly carbonated iron, which is in appearance an equally definite compound. I have no evidence to prove the explanation given of the cause of honeycombs in various stages. I do not know anything more difficult than to devise experiment which could bring to correct proof the amount of gaseous evolution in the various stages of the manufacture; and I would ask, in turn, how Mr. R. Mushet has proved that No. 1 iron gives out the greatest amount of carbonic acid? I should like to know, likewise, whether the gas is carbonic acid or carbonic oxide, or both, or in what proportions? Mr. R. Mushet, no doubt, will tell us all about it in a general manner with his inimitable assurance; but I should like to hear all the contrivances for ascertaining it. The theory I have advanced, whether correct or not, has an appearance of plausibility; and I think it is confirmed by the experiments just read by Mr. Wrightson at the Birmingham Institute, and which I should like to see reported in your Journal. He has ascertained what is confirmatory of my suggestions a year since—that the varieties of pig-iron do not depend so much on the actual quantity of carbon, as the *state* in which the carbon exists in combination. Taking No. 1 iron and white iron as two extremes, in which the carbon exists in two distinctly different conditions, it is very reasonable to suppose a more oxidisable tendency in the transition betwixt the two. Mr. R. Mushet's last experiment proves nothing; an alloy of oxide with wrought-iron always increases its fusibility. FERREUS.
July 18.

DEAN FOREST.

SIR,—In my letter of the 13th and 27th May, and 17th June, respecting dialling in the Forest of Dean, I have, as I find, done the grossest injustice to the three individuals alluded to therein, and especially to the mining engineer, who has directed the operations of boring, &c., at the work alluded to. I have clearly ascertained, that not one iota of blame can attach to this gentleman, and that he has conducted the work in the best possible manner. Whilst I must ever regret having given publicity to statements which may have given rise to injurious opinions respecting an individual, wholly undeserving of them, I am most happy to be able thus publicly to insert a full contradiction of the remarks, which I was erroneously led to apply to that individual, and this testimony will completely exonerate him.—ROBERT MUSHET: *Coleford, July* 24.

SAFETY MINING LANTHORN.

SIR,—I cannot but admire the tone of the letter of your correspondent, Mr. Crane, of last week, and which was very kindly noticed at some length by you; but think a safety-lamp should be considered more a scientific instrument than to be diverted to the source he proposes, at least in the shape suggested, as it would cause good ventilation to be entirely disregarded; and I consider the multitudinous chances of derangement even to the present portable and compact safety-lamp, from the common casualties of mining, quite numerous enough, without increasing their bulk, and making the evil worse. A candle cannot practically be applied to a safety-lamp, as it would be melted immediately on its introduction into an explosive atmosphere. To *solder* the disc of gauze on the top and sides would also be extremely dangerous, and the superfluous area of glass would also prove a serious objection from its increased liability to breakage. I consider the above objections would arise in the common usage of the safety lanthorn, as the companion light of each miner; but the more serious objection would arise, I am afraid, to completely enveloping it in gas, as, from the very great space that would be momentarily occupied by the explosive atmosphere and exploded, it would be sufficient to rent the lanthorn asunder, or, at least, to force its way through the gauze, and explode the whole—however, this can only be answered in real practice; but, from observations made with a common Davy, of about 19 cubic inches gas space, the force is quite sensitively felt on momentary introduction; and what the force, *or effect*, would be of introducing a safety lanthorn, of nearly 300 cubic inches of gas area, yet remains to be seen, unless Mr. Crane has submitted it to such a test, which he was bound to do previous to laying it before an unwary public. However, I hope Mr. Crane will pursue his praiseworthy course, and trust he will view a miner's safety-lamp in the light of an instrument standing between the collier and his numerous comrades, and their graves—their safety from an untimely end being solely dependent upon the sound and scientific principles upon which it should be based—for the attainment of which the names of Clanny and Davy will be even handed down to posterity, H. J.
Dudley, July 23.

IRON FROM CHINA.

SIR,—My attention has been called by a letter of Mr. J. M. Heath, in your last Number, to the communication of Mr. Radley in that of the previous week. Its blunders and absurdities have been so freely exposed by Mr. Heath, that it is only necessary for me to correct one misstatement in it, calculated to mislead the public, as to the address of this company. We have not, and never have had, any office or establishment in "Great Winchester-street, City;" nor does any Indian Iron Company exist there, or elsewhere in the City, that I am aware of, except this, which has been several years established in this yard.—J. CRITCHELL: *Indian Iron and Steel Company, King's Arms-yard, Moorgate-street, July* 26.

INDIAN IRON.

SIR,—The reply of Mr. Heath, in the *Mining Journal* of the 22d inst., being fuller of misstatements, and (without being so impertinently bold as to say wilful) misrepresentations, than my cursive attempt of the 15th, to elicit facts, I claim a brief space for reply. I shall not dilate so *cantancorous* a subject as our Indian hero of metal has presented us with, but merely instance how much more like a gentleman he would have appeared, if, instead of indulging in such self-sufficiency as "it required no extraordinary penetration to take the measure of my qualification to propound new discoveries in metallurgy," he would have recorded some new scientific facts in connection with Indian metallurgy in your columns. How *little* must this gentleman's mind be, when he can rest content to appear a scientific colossus before the public, on the terms that I may look little! His construction of my motives for writing to him are equally vain and inapposite, as it was done, not from any desire on my part to gain his esteem and countenance, but at the instance of others, who, having been led to believe that Mr. J. M. Heath was a very shrewd schemer and successful metallurgist, undertook to pay, to the tune of 3000*l.*, for a series of experiments, not so much whether steel could be made by a particular patented process of this gentleman's, as by plunging and floundering, in the dirty pool of *parvenu* science, *to find out a method of making steel.* However, the money was all spent, lent, and laid out—so that none of it ever came back, and without determining anything useful or new. The foreman of the works where these metallurgic quackeries transpired, afterwards, and in the absence of the Indian Sidrophel, undertook to make, and really did make, a ton or so of excellent steel, by a process the very opposite of our experimenter's, from the useless material, scoria, and dross left on the works—a full testimony of the incapacity of Mr. Heath. He may say truly, "as if Mr. Radley understood these said processes, or could pronounce an opinion on them," as no one, not even himself, could be competent to the task. As Mr. Heath declined on interview to affix his name to a written detail of the self-same processes introduced afterwards to a certain baronet, without which I would not allow a perusal, so he never acquired any ideas from me, then with what show of truth can he assert the expression above quoted? I do not desire to offend him, but I must ask him, how it is, if he be such a clever man, that during his personal presence at the councils and direction of the Porto Novo Iron-Works, the greater part of the capital, which now hangs as a perpetual clog by its frivolous expenditure, upon the useful progress of the Indian iron-works, was spent; and that some time after his arrival in England, but not till after his absence from the works, did the establishment ever evince any show of making its way!—that he should spend, without the slightest show of utility, 3000*l.* at Thames Bank Steel-Works, in 1845 and 1846.

Have I not as much right to indulge in the idea, that there are many varieties of hæmatite, beyond that which conferred the mineral title, as Mr. Heath has, without any knowledge of his own, to assume, *because Dr. Ure says so, that plumbago contains no iron?* I do not envy Mr. Heath his *wine and biscuit inventions, nor knowledge;* and as the *field of information* is *"common right,"* he cannot take that from me which I have, nor alter its quality. Will Mr. Heath give us some scientific facts about Indian metallurgy, so that we may be able to *take his measure.*
City, July 25. W. RADLEY, Ch. E.

LOCOMOTION ON COMMON ROADS.

SIR,—Although great praise is undoubtedly due to Sir James Anderson for his determination not to allow this important subject to drop into the oblivion of desuetude, yet I cannot help feeling that, as the progression now adopted is exactly like that previously entertained, so the present efforts will, in like manner, be abortive. The mischief is done by concentrating public subscriptions upon the efforts of one man, instead of upon those of many; and here let us examine whether the statements put forth, in respect of this steam carriage, will acquit or condemn our judgment from, or to the charge of, premature or frivolous criticism. Mr. Motley says, that the objections to former attempts, on the part of Gurney, Hancock, Squire, Macerone, &c., &c., consisting in *"noise, and the appearance of steam and fire,"* have been now entirely overcome. It was always my opinion, that this grand antithesis to railway transit could never be achieved without rails, curves, and shunts on common roads, until the weight of the locomotive could be reduced to that of the mail-coach—whilst the power of 15 to 20 horses could be possessed by the machine, together with the medium of easy deviation and arrest—volitionary increase, or diminution of tractive power, to suit the declivity, level, and acclivity—a far more rapid generation of steam than is at present known, or at least practised, with such a form of engine, as to accommodate that destructive difference of stroke, inherent in the resilient oscillation, so much greater on common than iron-laid roads.

Sir James Anderson failed before time, like all others, principally in the excessive weight of his carriage, about 5 tons; and we are not told what amelioration has been made in this item of the *opprobrium doctorum* of VIATIC STEAM LOCOMOTION now to be made public. The mail-coach of the anti-steam age never exceeded, with its compliment of conductors, luggage, passengers, provender, spare splinter bars, &c., 2 tons 10 cwts.—whilst the lightest steam-coach ever made was little less than double the weight. Macneill's experiments of the *vis inertia* of the carriage wheels on *macadamised* roads, would, engines included, give, at 10 miles an hour, with four wheels, 84 lbs. per ton—whilst, on a slope of 1 in 600, it would amount to 128 lbs. per ton; and with 1 in 20 it becomes 318 lbs. per ton; but we have plenty of slopes on common roads of 1 in 10, which will require a motive force equal to *one-fourth* of the load.

Again, the expense in wear and tear between transit on a rail-laid way, and the steam-carriage on a smooth *macadamised* way, is as 1 : 68 from the shake and wear of fires, &c. With regard to the "bite" of the driving wheels on a macadamised road, there is every reason to believe that it is much less than what obtains on a railway, estimated, by Pambour and others, at $\frac{1}{15}$th of the superincumbent weights; and to this item of defect may, undoubtedly, be referred much of that loss of power, so much complained of in past trials. Reasoning upon these data, conjoined with the evidence which a view of an engraving of this new steam-coach has furnished my mind, I do not see anything to induce one to suppose that we are much nearer the solution of this important question, nor to predicate that this praiseworthy effort of the knight will be more distinguished for success above that of the *Autopsy*, and other similar vehicles. Reduce the weight of a 20-horse carriage, with engines, under 30 cwts., which, with its load, shall not exceed 50 cwts. Let the engines be composed of few parts—those stationary very light in build—those destined to motion strong and massive: discover some method of generating steam, *ad libitum*, with greater economy—make provision for the reservation of power, *pro ne nata*, and then are the chief obstacles surmounted.
City, July 24. W. RADLEY, Ch. E.

SPONTANEOUS GAS.

SIR,—In answer to "W. D. E.'s" inquiry, contained in last week's publication of the *Mining Journal* (22d July inst.), spontaneous gas has been emitted from old colliery workings, midway between Newcastle-upon-Tyne and North Shields, for the last 20 years, to the extent of thousands of gallons every 24 hours. The gas is brought up from an old shaft by a tube of from 3 to 4 in. diameter, and has burnt night and day without interruption for the period mentioned. The flame illuminates the whole neighbourhood; and the stormiest weather appears to have no influence to extinguish it. Some years ago, several gentlemen had obtained a grant of the gas, with a view to render it applicable for lighting, and had a gasometer made to correct and distribute it. The gas was conveyed to the Wall's End station, and used there for some time; but as it was not considered sufficiently pure, as it came from the workings of the mines, for domestic use, and some of the parties dying, the scheme was not persisted in. There is no doubt that this spontaneous gas, by proper management in its purification, might be rendered useful to a large population, and would be remunerative to a company employing capital to introduce it; and, as it is found about midway between Newcastle and Shields, and near to the railway, the distance between those towns (eight miles) is no insuperable barrier to its conveyance to them both. VERAX.
July 26.

THE RETURN TO PARLIAMENT ON PATENTS.

SIR,—A recent Parliamentary paper, quoted in last week's *Mining Journal*, sets forth a return of the number of letters patent for inventions granted in the United Kingdom in 1846 and 1847, stating it to be 761 for 1846, and 740 for 1847; the fees being, for 1846, 34,103*l.*, and for 1847, 32,977*l.* Now, as this return may convey the erroneous impression to the minds of most readers, that the revenue derived by the Government from patentees is not so large as it is usually supposed, I would remark, that this return is "a delusion, mockery, and snare,"—several large items being omitted in it, as the Attorney and Solicitor-General's fees, the fees paid at Edinburgh, and the *stamp duty* on patents (or, in other words, the tax levied upon the Royal *free (!)* grants). The real state of the case is this, taking into account the stamp duty, the whole governmental charge for letters patent is—for England, nearly 100*l.*; Scotland, nearly 70*l.*; and Ireland, 125*l.*, exclusive of extra fees on patents having the colonies annexed, and other specialities. For sake of simplifying the computation, we may, considering all things, take the fees at 100*l.* each patent, whether English, Scotch, or Irish; this would give us, for the 761 patents, in 1846, not 34,103*l.*, but 76,100*l.*; and, for the 740, in 1847, not 32,977*l.*, but 74,000*l.*, which is not very far from the real amounts. After all, even this calculation does not show the actual amounts paid by inventors to Government—as, on every specification, stamp duties and Chancery fees have to be paid, varying from about 10*l.* upwards: the approximate total amount of this can scarcely be ascertained; but, looking to my own experience in these matters, I would not hesitate to challenge the Government to disprove that the dues arising from patents for inventions, received by them, or their nominees, in various shapes and forms, for the years 1846 and 1847, were at least 100,000*l.* per annum. I have been induced to occupy thus much space, in order, on the one hand, to prove that the revenue does not receive an insignificant sum from letters patent, as would be supposed from this return; and on the other hand, to exhibit the real extent of the grievous tax imposed upon British ingenuity and industry, in the most oppressive form—viz.: by making inventors pay a large sum at once for their protection, without giving them time to reap any profit from their discoveries, to which the attention of the Legislature will, I trust, be awakened by the petition I have been getting up, and which has been already given in this Journal.—F. W. CAMPIN: *Patent-office*, 210, *Strand, July* 26.

ATMOSPHERIC RAILWAY VALVE.—Mr. W. Froude, of Darlington, has obtained a patent for a valve to cover the longitudinal opening of an atmospheric railway tube. On each side of the aperture, or opening, are flat valve-seats, bounded by vertical flanges, the right angles formed by which being rounded off, and slightly recessed in the angle. The lower surfaces of the valves, one on each side, are formed of plates of iron, about 8 in. in length, one edge of the plates forming, with the circular recess in the seat, the hinge or centre of motion; the other edges of the plates are nearly over the centre of the opening. The two edges of the vulcanised India-rubber, with which the iron plates are covered, meet ridge-like, and, being pressed together by the external pressure of the atmosphere, form an air-tight joint.

NEW INVENTION FOR STOPPING RAILWAY TRAINS.

[Specification of patent granted to Samuel Cunliffe Lister, Esq., of Manningham Hall, Bradford, for improvements in stopping railway trains and other carriages, and generally where a lifting power, or pressure, is required. Patent dated January 18, 1848.]

The patentee, in describing his invention, commences by stating, that according to the arrangements hitherto employed, for actuating the breaks of railway carriages, to retard their motion, much difficulty and inconvenience have been found, in consequence of the guards not being able to actuate the breaks of each carriage simultaneously, by which their impetus cannot be suddenly checked; and it is to obviate this inconvenience that the patentee proposes to substitute the present improvements in lieu thereof. The arrangement by which he proposes to effect this is as follows:—To each of the carriages there is attached an air reservoir, or tank, of sufficient strength to sustain a pressure of from 50 to 60 lbs. on the square inch. This reservoir, or tank, he charges with compressed air, by means of an air-pump of the ordinary construction, actuated in any convenient manner. In connection with this tank there is a pipe, which communicates with a main pipe, extending beneath the framework of each carriage, and in the direction of its length, and midway between the wheels, upon which the carriage is mounted. From each side of this main pipe there extend branch pipes, communicating with cylinders, suitably fixed between each pair of wheels at the side of the carriage; each of these cylinders are fitted with two pistons, working air-tight therein, and having piston-rods connected to them, the opposite end of each being furnished with a break-block of the ordinary kind; but instead of the middle of the block being in a line with the centre of the axle, upon which the wheel is keyed, the bottom of the block is in a line therewith, for the purpose hereafter described.

The patentee states that, assuming the pressure of the compressed-air in the main tube, or pipe, when filled, to be 5 lbs. on each square inch of the piston, and each piston to present a surface of the area of 200 square inches, there will be a force of 1000 lbs. exerted upon each piston, pressing the break blocks against the peripheries of the wheels; and this pressure will take place simultaneously in all the carriages comprising a train, upon the guard opening a valve for admitting the compressed-air to pass from the reservoir, or tank, into the main pipe, by which the impetus of the train will be suddenly checked. The patentee states that, by increasing the pressure of the compressed-air, and the area of the piston, the pressure of the break blocks may be augmented; and, although he has shown by the drawing, annexed to the specification, two pistons in each cylinder, he does not confine himself to this arrangement—as, in some cases, it will be found cheaper for each break block to have a separate cylinder and piston; and, instead of employing compressed-air to effect pressure against the wheels, a vacuum may be formed in the main tube, and the pressure of the atmosphere be allowed to exert itself upon the other side of the piston—the end of the cylinder being left open for that purpose.

The claim is the so applying air, or other elastic fluid, that it may be conducted to, and made to act upon, the wheels of the carriages simultaneously, or by a vacuum as described. There is a disclaimer attached to this specification, discarding as useless that part of the title expressed by the words—"and generally where a lifting power is required."

Patent-office and Designs Registry, 210, *Strand, July* 24.

LITERARY NOTICE.

A Word or Two on Port Wine: addressed to the Public generally, but particularly to Private Gentlemen; showing How, and Why, it is Adulterated, and affording some means of Detecting its Adulterations. By J. J. FORRESTER. London: Pelham Richardson, 23, Cornhill; John Olivier, Pall Mall; and Royston and Brown, Old Broad-street.

Mr. Accum, some years since, published a work on the adulteration of food, entitled *Death in the Pot*. Mr. John Mitchell has lately favoured the public with a similar work; and we have now before us a pamphlet under the above title, from the pen of a partner in the eminent Oporto house, in the wine trade, of Offley, Forrester, Webber, and Cramp, giving us an insight into some of the delicate practices of the manufacturers of port wine in Portugal, and the adulterations which it undergoes, even before it leaves Oporto. The writer does not hesitate to acknowledge that, in this attempt to promote the use of pure wine only, one of his chief motives is to advance his own interests as a port wine merchant; at the same time, should he succeed, he will have had the satisfaction of greatly benefitting the farmers of the Alto Douro, and contributed, in no trifling degree, to the pleasure and health of the British public. It cannot be denied, that publications of this description are of great public utility—putting persons on their guard as to the kind of article they purchase, tending in a great measure to make them in some degree judges of the quality, and thus deterring the unprincipled from forcing their adulterations too freely. The author's description of the growth of the various species of grape, the descriptions of wine which they produce, the objectionable methods adopted to get wine forward, and into the market, at an early period, the modes of adulteration practised, &c., are all highly interesting, and well worthy the perusal of all port wine drinkers, and the trade.

AN ENORMOUS GAS-METER.—A gas-meter of immense size has just been cast and completed at the iron-works of Messrs. Glover, in Charles-street, Drury-lane, which is about to be erected in Covent-garden Theatre, for the measurement of the gas supplied to that establishment by the Chartered Gas Company. It is what is called a dry gas-meter, no water being employed in the process as in the common meters, and is the invention of Mr. Defries, of the Hampstead-road, by whom it has been patented. This species of meter is exceedingly accurate in its measurement, and is likely to become universal. The specimen now to be seen at Messrs. Glover's contains two chambers—the upper one contains the machinery; the lower is divided into six compartments by three moveable diaphragms and three fixed partitions. The gas enters at the inlet pipe, whence it passes to the bottom of the meter, and fills each compartment in succession. A continuous supply is kept up by the action on the moveable diaphragms, which act upon the indicating machinery by means of of a very simple and ingenious contrivance, which registers the consumption of gas with unerring accuracy, on a plate of six dials and indexes, from units to millions. The meter is capable of measuring 6000 cubic feet of gas per hour; and is to measure the supply of 1500 burners. It weighs two tons, is 16 ft. in circumference, and 8 ft. in height. The shape is a sexagon, with gothic devices and ornaments; the name of the inventor, the gas company, and the Royal arms, are introduced in the castings. As a piece of iron casting it is amongst the very best things produced by the London forges. We were treated with great urbanity by the founders, and should recommend any gentleman who might value the meter as a work of art, or need one like it, to pay an immediate visit of inspection. We understand that it has been visited by many eminent engineers, who have pronounced the most unqualified opinion as to its great powers and extraordinary merits.

SUNDERLAND DOCKS.—The extensive works now in progress for the formation of the new docks at Sunderland are proceeding in the most rapid and successful manner. The sea has been most effectively banked out of the tidal basin, and nearly the whole length of the large dock; and there is the fullest confidence that this gigantic undertaking will be brought to a successful completion within the time fixed; and, what is still more unusual, there is a well-grounded expectation that the works will be finished considerably within the estimated cost. The progress that has been made since the short time that has elapsed when the foundation stone was laid, is highly creditable to Messrs. Craven, the contractors; and the easy manner in which formidable difficulties have yielded to the plans of Mr. Murray, the engineer, is most honourable testimony to that gentleman's skill and thorough knowledge of marine engineering—the most hazardous, if not the most difficult, branch of the profession. The directors have just made a further call of 3*l*. 10s. per share, to be paid against the 21st of August next, which sum will make the amount then paid by the shareholders one-half of the estimated cost of the entire docks. The works begin to have a very noble appearance, and, when finished, will be the most magnificent undertaking of this kind in the kingdom. A dock of this magnitude, gained from the sea within the range of the tides, is an enterprise now proved to be practicable, and a safe undertaking. From the completion of the docks, some 12 or 15 months hence, a new era will commence in the trade and commercial importance of the town and port of Sunderland.

BRITISH SHIPPING.—It appears from a return moved for by Mr. Labouchere, M.P., that the total number of British vessels built and registered since the passing of the Act 5 and 6 William IV., cap. 56, amounted, in 1837, to 26,087 (tonnage, 2,879,211); in 1838, to 26,609 (aggregate tonnage, 3,018,014); in 1839, to 27,745 (tonnage, 3,219,630); in 1840, to 28,962 (tonnage 3,472,499); in 1841, to 30,052 (tonnage 3,679,731); and in 1842, to 30,815 (aggregate tonnage, 3,795,382).

LIFE POLICIES OF ASSURANCE BILL.—In the House of Commons, on Tuesday, Mr. Fagan, in moving the second reading, said, that since this bill was read a first time, considerable anxiety had been exhibited in the mercantile community in reference to its fate, and the leading assurance companies had expressed themselves in favour of the principle on which it was framed. The object of this bill was to make policies of assurance, which were assignable only in equity, assignable also at law. An impression had prevailed that such was the case already, but the opinion of counsel had decided that it was not, and that the concurrence of the legal personal representative of the assured could not at present be dispensed with.—The bill was then read a second time, and ordered to be committed on Wednesday next.

SUSPENSION BRIDGE AT NIAGARA FALLS.

It is contemplated to have the foot bridge at the Falls ready for crossing on the 4th of July. This will be a great curiosity, and many will avail themselves of the adventure. The following is to be the composition of the railroad bridge:—Number of cables for bridge, 16; number of strands in each cable, 600; ultimate tension, 6500 tons; capacity of the bridge, 500 tons; number of strands in the ferry cable, 37; diameter of the cable, ⅜th of an inch; height of stone tower, 68 ft. 1 in.; height of wood tower for ferry, 50 ft.; base of the tower, 20 square ft.; size at the top, 11 square ft.; span of the bridge, 800 ft.; whole weight of the bridge, 650 tons; height from the water, 230 ft.; depth of water under the bridge, 250 ft. This suspension bridge is the most sublime work of art on the continent. It makes the head dizzy to look at it, and yet it is traversed with as much security as any other bridge of the same width. We were present while the workmen were engaged in hanging the planks over the fearful chasm. It look d like a work of peril, but it was prosecuted with entire safety. Not an accident has happened since the first cord was carried across the river at the tail of a kite. It is impossible to give the reader a clear idea of the grandeur of the work. Imagine a foot bridge 800 ft. in length, hung in the air, at the height of 230 ft., over a vast body of water rushing through a narrow gorge at the rate of 30 miles an hour. If you are below it, it looks like a strip of paper suspended by a cobweb. When the wind is strong the frail, gossamer-looking structure sways to and fro as if ready to start from its fastenings, and it shakes from extremity to centre under the firm tread of the pedestrian. But there is no danger. Men pass over it with perfect safety, while the head of the timid looker-on swims with apprehension. We saw the first person pass over it—Mr. Ellet, the builder. His courageous wife soon followed him, and for two days hundreds, attracted by the novelty of the thing, took the fearful journey. It is worth a trip to the Falls to see this great work, although it is not probable that 1 in 20 will have the nerve to cross upon it. For, strange as it may seem, there were those who had no hesitation to slide over the awful chasm in a basket, upon a single wire cable, who could not be induced to walk over the bridge. And this aerial excursion is thrillingly exciting. A seat on a locomotive, travelling at the rate of 60 miles an hour, is nothing to it. When you find yourself suspended in the air, with the roaring, rushing, boiling, Niagara 259 ft. below you, if your heart don't flutter, you will have nerve enough to swing over Vesuvius! And yet the sensation is not altogether unpleasant. The ride itself, as the old lady said about skinning eels, "is nothing when you get used to it." Another new attraction at the Falls is the excursion from the site of the suspension bridge to within a few rods of the Horse-shoe Falls in the little steamer *Maid of the Mist*. In no other mode can the visitor obtain so grand a view of the great cataract. Every one makes the trip, and all express the same sentiment, that the Falls are not seen in all their sublimity and grandeur except from the deck of the *Maid of the Mist*. The run is made with perfect safety.—*Albany Journal.*

CALEDONIAN RAILWAY—NEW PREFERENCE STOCK.

The proposal of the directors of this company to raise 745,000*l*. by the creation of a guaranteed stock, has led to considerable discussion, and even to some difference of opinion, amongst a portion of the shareholders, hitherto remarkable for the unanimity and cordiality with which they have supported all the measures submitted to them. The meeting for the final adjustment of this question was held on Wednesday last, and the proceedings were more than usually animated and interesting.

The CHAIRMAN, at the close of his preliminary observations, intimated that the directors had come to the resolution of proposing, instead of a preferential stock guaranteed 7 per cent. in perpetuity, that the guarantee of that amount should be limited to five years, and that the stock should be guaranteed 6 per cent. thereafter in perpetuity. The stock to be thus created will consist of 74,518 shares of 10*l*. each, to be called 10*l*. guaranteed shares, and to be paid up by four equal instalments, in alternate months, commencing on the 21st day of August, and terminating on the 21st of February next. This stock is to be issued to the holders of the existing shares in proportion to their nominal value. It is the intention of the directors, however, to reduce the half shares to 12*l*. 10s., instead of 25*l*.

The purposes to which this new capital is to be applied, were clearly and satisfactorily explained by the chairman. In the first place, it is absolutely necessary, for the proper accommodation of the increasing traffic, to complete the station in Buchanan-street, and to extend the Garnkirk to that point. A large sum has been expended in relaying the rails of the Garnkirk line, in order to adapt it to the through traffic of the Caledonian; and this money requires to be provided by a distinct arrangement. It is also of the utmost importance to effect the junction between the Clydesdale line and the railways on the south of the Clyde, including the Greenock, the Pollock and Govan, the Ayrshire, and the General Terminus. Without this connection, the traffic of these lines cannot be brought upon the main line of the Caledonian, thereby involving an enormous sacrifice of revenue. In addition to these urgent demands for the early completion and improvement of the line—without reference to new branches or other works which do not require to be immediately proceeded with—a large sum has been expended in the purchase of land, greatly exceeding the estimates on which the cost was originally calculated. These estimates were carefully framed by Mr. Smith of Deanston; and, of course, it was no fault of the directors that, from recent enactments and other causes, they were compelled to pay more for land than they could possibly have anticipated. The meeting generally appeared to concur in the absolute necessity of raising the proposed capital by some effectual process. The only question, in fact, was *how* it could best be provided.

Two of the shareholders, who were adverse to the specific proposal of the directors, suggested different plans of meeting the emergency. Mr. Jacobs thought that a moiety of the stock should be raised in the first instance, and the remainder delayed, with a view to the improving prospects of the money market. Another shareholder, Mr. Hilditch, seemed to think that the better method was to raise 500,000*l*. by an issue of shares guaranteed 7 per cent. in perpetuity. These propositions could scarcely be regarded as in any sense improvements upon the measure deliberately adopted by the directors—while they left an immediate, urgent, and unavoidable necessity dependent upon contingencies which confessedly could not be controlled. The money, it was known, could be raised at this time, if the powers sought were granted, and it was absolutely required for the acknowledged advantage of the undertaking. In the face of such reasons the prudence and wisdom of adopting the propositions of the directors seemed to be placed beyond all question. A few of the shareholders, however, remained unconvinced, and went to a division, as will be seen by our report.

We think, however, it would not be dealing fairly with these shareholders, who evidently hold a large stake in the company, if we failed to observe that the real ground of their objection to the proposal was based upon their opinions as to some parts of the policy of the directors. They appeared to doubt the wisdom of the leasing agreements entered into with other companies. From the tenor of the observations expressed on this subject, it was obvious that the views on which these arrangements had proceeded were greatly misapprehended. It is no business of ours to vindicate the policy of the directors on general grounds, especially as regards the interests of other companies; but, in the present state of railway property, it is clear that they were actuated by a paramount regard to the interests of their own undertaking, in the knowledge and belief that other companies were prepared to adopt the same means for their own advantage and protection. This is the true justification of the arrangements for the lease of the Central, the Dundee and Aberdeen Junction, and the Scottish Midland lines. Other companies may have good and substantial reasons to urge against such agreements; but, as between the shareholders and directors of the Caledonian Company, there is scarcely any room for difference of opinion amongst those who thoroughly understand the facts and bearing of all the questions in the case.

The consequence of the resolutions adopted by the company will be to carry forward those indispensable objects explained by the chairman to a speedy and satisfactory termination. It was stated that the result of these measures will be to add at least 2000*l*. to the weekly income of the principal line. From all we have been able to learn, we believe that this statement will turn out to be moderate, and not an exaggerated, estimate of the value of the traffic accruing from the works to be immediately proceeded with and carried out during the present year.—*Scottish Railway Gazette.*

IMPROVEMENTS IN GLASS BOTTLES.—A great improvement in the manufacture of bottles, and one which promises to reduce that prolific source of loss to the exporter of bottled beer, &c.—the bursting of bottles—to a mere nothing, was recently patented by Messrs. Hely and Norton, of Crutched-friars. It consists in making in the neck of the bottle a vent-hole near the rim, which permits the bottle to be completely filled to that point—the vent-hole allowing any liquid displaced by the cork, or stopper, to pass off from the bottle; the cork, or stopper, when driven in, closing the vent-hole as well as the mouth. This vent-hole may be situate on the shoulder, or in the "punt," of the bottle; but then it requires to be provided with a stopper of its own, which is inserted in the vent-hole during the filling of the bottle, and must be released when the same is filled, as far as it can be in that way—so that liquid sufficient to fill it completely may be injected through such vent-hole when that is to be re-corked. Under the same patent is included an improved cork, or stopper, which will effect the same object; also several new forms of bottles, having extra strong necks and shoulders, to enable them the better to resist the pressure of the contained liquids—some of them possessing the novel faculty of standing on their mouths; also a highly ingenious machine for corking bottles, which renders that critical operation as easy a matter as it is to place a cork in the mouth of a phial.

IMPORTANT INVENTION—NEW TURN-TABLE.—We had an opportunity, on Saturday, of witnessing the practical application of one of the most recent and important inventions in connection with the economy of railway termini. The inventor, in this instance, is Mr. Turiff, of the firm of Messrs. Turiff and Fullarton, Vulcan Foundry, Paisley, and the machine of his ingenious construction, a powerful turn-table. Having been driven a short distance up the line, where the reserve carriages are kept, in company with a few gentlemen, the engine and tender were turned into the side rails, for the purpose of testing the power and efficacy of the turn-table. The engine and tender, which weighed 36 tons, were then placed on the turn-table, and two men turned it, by means of two wheel-pulleys, with comparative ease, in the almost incredible short time of about a minute and a half. There was not the slightest jar while the movement was proceeding; on the contrary, the carriages rested on the table as softly as if they had been on cushions. The great advantage of this invention of Mr. Turiff's is, that with former turn-tables there were two frictions, while with this table there is only one; it is relieved by a powerful weight resting on the centre, which contains four large bolts, that lift the table from the side rails beneath. The machinery, like all inventions of practical use, is very simple, but composed of massive beams of iron, and can be worked by circular rollers, in cases of emergency. The turn-table itself is 36 feet in diameter, weighs 25 tons, and sustains 51 tons revolving weight. The inventor has given the utmost satisfaction to the railway authorities—having been tested in presence of Mr. Johnstone, manager of the Glasgow and Ayr Railway, and other gentlemen, before it was removed from the foundry in Paisley. It is, perhaps, necessary to remark, that the mechanic employed in the erection of the turn-table at the railway here—Mr. J. Logan—has very accurately discharged his duty, and proved himself an efficient workman.—*Scottish Railway Gazette.*

A MOST SINGULAR CURE OF A BAD LEG BY HOLLOWAY'S PILLS AND OINTMENT.—Mrs. Elizabeth Harker, of Willunga, Adelaide, had been suffering for nearly 30 years with an ulcerated bad leg, produced by a blow, and which was thought incurable, as it had defied the skill of several practitioners, both in England and the colony; at last recourse was had to Holloway's ointment and pills, and by their efficacy the leg has been perfectly healed, presenting scarcely the trace of a wound. This case has excited so much astonishment in the colony, that the agent for South Australia has published it in the *Adelaide Observer* of the 12th of February, 1848. These surprising medicines are sold by all druggists, and at Professor Holloway's establishment, 244, Strand London.

MINING ON THE RHINE.

[From BANFIELD'S *Industry of the Rhine.*]

Siegen is a place of some commercial importance, as the residence of numerous owners of mines, furnaces, and forests, and the seat of most of the commercial transactions of the district. But its monopoly has driven some of the largest adventurers to a distance, and Kirchen, with Olpe, already mentioned, are centres of great activity on a sounder footing. But the country about is more interesting than the town; and it is now happily accessible by some of the finest roads in Prussia.

The valley of the Upper Sieg is described as the school for meadow irrigation in Germany. The beautiful manner in which these meadows are laid down not only causes them to produce abundant crops, but allows the floods, that are frequent in spring and autumn, to roll over the ground without damaging anything. A little below the town the valley grows very picturesque, and the wooded heights on both sides close it in majestically. The roads run along the left bank, having been cut along the rocks at a level little above that of the floods, so that the slates are laid open sometimes to a height of 30 or 40 ft., and best show the nature of the ground. Traces of mining are to be seen on all sides; but, at a short distance from the town stands a house at the mouth of an adit, leading to one of the most profitable mines of the district, the Philipshoffnung. It is an iron and cobalt mine, yielding the last-named precious mineral in great abundance. The washing-works belonging to this mine, and which, until lately, washed for the whole district, lie about two miles distant. This establishment, which is said in 1845 to have yielded a clear profit of 20,000 upon a comparatively small outlay of capital, belongs to M. Graf, of Siegen, and Niemann and Horstmann, of the Horst on the Ruhr, with some few shareholders. The whole of the adjacent hill shows symptoms of cobalt; but it is rarely found in large quantities, and the poorer ores are not well managed: otherwise, at the high price of 4s. to 6s. per lb. when concentrated by washing, more ought to be made of it. At the first village, about three miles from Siegen, a valley runs into the heart of the mountain chain that divides the Heller from the Sieg. The little River Eisern runs out of it; and the village itself is called Eiserfeld, or the Field of Iron, so that the traveller is at no loss to know what here most occupies the people's thoughts. In fact, every man is a miner and furnace owner; and the white furnace-skin (usually a calf's hide dressed white, and left uncut) is constantly worn by the villagers when haymaking or working in their meadows. The mining district officer resides at Eiserfeld, and can give permission to strangers to visit any mine in the neighbourhood.

Perhaps the most remarkable iron mine, after that of Müsen, is the Eisenzeche, the entrance to which is in a side valley opening into that of the Eisern. It is one of the oldest workings of the neighbourhood; and its adit, which runs upon the vein, is about an English mile in length. Here, too, there is no provision for horse-power, but a tramroad, as at Musen, and the Philipshoffnung, is used to run out the stuff. Around the entrance heaps of ore, of two tons each, lie nicely pi'ed, each with a wooden cross stuck in it, marked with some sign like those mentioned as frequent in the miner's heraldry—a ship, or a tree, or occasionally the initials of a name, to indicate its being appropriated in the general division to one of the shareholders. This mine belongs altogether to small miners, and has been worked by themselves from first to last under the direction of the mining-officers. The vein is occasionally of great breadth, and the stone is of good quality; but, under the present system, where no concentrated work is undertaken, the profits do not more than afford the proprietors moderate wages. Not far from this mine, which is surrounded by other mines that occur at intervals of a few feet for miles in all directions, the visitor can see the arrangements for smelting, common in the country.

The furnace of Eiserfeld stands about a mile up the valley, on a site to which water has been led to drive the blast. The wheel is 24 ft. high, and the furnace itself not much higher; but the latter stands in the centre of a large casting-house, which affords shelter in the inclement season to the numerous smelters and their gossiping neighbours. We have mentioned that each furnace is limited to a number of days. It is common for every man to manage his smelting during his own days in person. He has, therefore, two sheds, one for his ore, and another for his charcoal; and the curious appearance of all these irregular wooden constructions, huddled round the furnace and blackened by its smoke, forms an object perfectly suited to the mysterious gloom of old mining legends. Here, then, through the long winter, unless frozen out by the intense cold of the season, the villagers sit breaking up their ore with hand-hammers, the never-failing pipe in their mouths, to light which frequent trips to the furnace below are necessary, and give an opportunity of relieving the tedium of their task with gossip. As each man's turn comes, he wheels his ore to the furnace-mouth under the superintendence of the Hüttenmeister, an official selected by the shareholders, of whom the majority are usually villagers. The whole establishment becomes in some measure a portion of the village property; and the labourers, women, and all required beyond the actual shareholders, are taken from the inhabitants. The richer shareholders do the drudgery work through their men; but the furnace matters are important enough to call for frequent visits and lengthy discoursings even on the part of the notables. To this must be added the pleasure—acknowledged, though not yet defined by metaphysicians—which all the Saxon race seem to find in watching the glow and flame of a well made-up fire, whether in a furnace or a grate.

The cold, which is so intense as occasionally to freeze the rivers to the bottom, seems to have no power upon the water which drains from the mines; and thus, when a supply of mine water can be obtained, the adjacent fall is of proportionate value. The grant of the right of mining does not include the disposal of the water, unless specially applied for. Thus a third party, desirous of establishing foundry or washing works, can obtain the water of any mines that may suit his purpose on application to the mining department. Land is also unhesitatingly appropriated, when required for metallurgical purposes, although the amount to be paid in compensation of its use is left open to agreement or litigation, as the parties best like.

The 10 iron furnaces of the district are worked mainly by the proprietors; some few capitalists of Siegen having a few of the shares. The peasant owners are also shareholders in mines, and in the forests around, which supply the charcoal consumed. They manage to divide their time between the mine, the forest, the furnace, and their land, in such a manner as to be unceasingly employed, and they calculate closely enough in isolated speculations. But the grand calculation of all, the benefit conferred by division of labour, is unknown to this community. There has throughout Germany been decided hostility to all concentration of capital in few hands, with the exception of the fundholders. The laws which on one side appear to protect and encourage mining and manufacturing, are in a great measure counteracted by others which invest a prior right in water and other necessaries in the agriculturist. As long as the villager is both agriculturist and iron-master, this collision is concealed, but it becomes revealed as soon as the capitalist steps in to concentrate and economise the scattered forces. Yet, so low has the estimation of mining and smelting properly been brought in the Siegen district, that nearly all the furnaces, and all hammers without exception, might have been bought up at moderate prices in the year 1845 while the price of English iron was low. The period of depression was favourable for some progress to improvement. Amongst other projects, it is currently reported that the Government contemplates reforming its exaction of the tithe which is now levied on the gross produce. Probably the French system of a tax on the profits of mining adventurers, such as now subsists on the left bank of the Rhine will be substituted, and both the crown and the miner will assuredly be gainers by the change.

But more would be gained by promoting the concentration of the numerous small industrial undertakings in matters that ought to be conducted on a large scale. Iron ought beyond all doubt to be everywhere produced at the lowest possible cost, that we may be able to dispose of the greatest possible quantity for the manufacture of machinery, upon which the refinement of labour depends. This can only be effected with the aid of large establishments. In such, the extent of the operations produces a large amount of profit, even if the rate of the profit be small. The deductions from the amount of profit to pay wages and to purchase materials can, under such circumstances, be greater than when the total profit is small, whatever be its rate. But if it be a difficult thing to convince small landowners and miners of this truth, it ought not to be so difficult to inculcate the same truth to governments. The change said to be projected in the levying of the royalty would be from a mode only practicable amongst numerous small proprietors, to the mode which alone is practicable when capital is concentrated. For no capitalist will embark in a speculation liable to a rigid tax that does not vary with the changes in his rate of profit.

M. Schenck's valuable *Statistics of Siegen* give an interesting survey of the state of mining in this district. We find in 1834—

District.	Number of mines.	Number of miners.	Value raised.
Eisern	229	491	$57,750
Gosenbach	57	185	9,837
Müsen	97	317	55,026
	383	993	$122,613

The quantity and value of the ores raised stand in an inverse proportion to the number of small mines, but in a direct one to the number of large ventures. The mines of Müsen employ on an average 100 hands. We are told in another table that the mines returned as follows:—

District.	Profit on paying mines.	Loss on losing mines.
Eisern	$12,948	$10,022
Müsen	15,979	3,620
Gosenbach	142	5,156
	$29,069	$18,719

There was thus a serious loss on mining generally in the Gosenbach district, where there is the greatest number of small mines. In Eisern the small mines, with heavy losses, almost eat up the profits of the two large ones. In Müsen, where there is a majority of large mines, the profit and loss account stands better. But, assuming as M. Schenck does, that $70,000 went in wages, yet this is only $70, or about 10*l*. 10s. per head, for the miners; while about $10,000, or nearly 1500*l*., was the result as gain to the owners of 383 mines, for which a monopoly had been kept up during 250 years.

One unfortunate result of the small mine system has been to prevent its being ascertained whether the nature of the country of Siegen, and the run of the veins in those old slate formations, favours concentrated mining or not. That such was the case seems to have been the opinion of a very sound miner, whom we shall further on our tour find in the management of large and well-managed works in Baden. M. Daub, while in the mining department of this district, had commenced a statistical survey of the mines, intending to show the loss entailed by the repetition of shafts, adits, and other workings, that would be useless where the works were more concentrated, and a greater extent of ground would be opened by one shaft or adit than is now attained.

Some large mines in the Eisern district afford proofs of the truth of this calculation. The Philipshoffnung that has been mentioned has three veins opened by one adit. Another mine, named the Glückstern, purchased a few years back by the Mudersbach Mining Company, founded by an eminent Frankfort banking firm, and which also yields cobalt and iron, opens three parallel veins with one shaft. There seems no reason, from the information kindly supplied by the mining officers, why the whole of those mountains, with their rich veins of silver, lead, sparry iron ore, with cobalt and copper pyrites, should not divide off into lots, that with little labour would yield good profits to shareholders. Perhaps speculation now only waits the decision of the Prussian Government on the tithing question to start. The tithe, as it is now taken, falls heavily on copper, lead, and cobalt mines, as it is taken from those ores after they are washed—that is to say, have become a half-manufactured article. This mode of rating checks the erection of stamps and washing establishments. As far as cobalt is concerned, it has hitherto only been paid under protest, as the washing of this valuable mineral is the nicest, and, at the same time, the most expensive, purely mechanical process that the miner performs. The process may be seen either at the works of Messrs. Horstmann and Niemann, at Gosenbach and Scheiden, or at those of the Mudersbach Mining Company, which wash for all the Siegen cobalt mines. When cobalt is found in quarry, it becomes a mere question of the cost of carriage whether it ought to be washed or not. Its destiny is to be combined with glass when the grey steely-looking mineral turns into a beautiful deep blue. The glass, when minutely powdered, makes smalts that are used in paper-making and in dressing linen. For both these purposes they cannot be replaced by any other blues, whether mineral or vegetable, although many are substituted. Paper blued with other colour than genuine smalts loses its colour and becomes spotted; and, although useful for momentary purposes, cannot be used where it is intended to be kept for a while. Linen or cotton articles, blued with the genuine cobalt, improve in whiteness when kept, whereas all other cloths get yellow, and are especially marked at the folds. Thus ladies and lawyers are interested in no small degree in Siegen mining. But to return to the works. Those of the Mudersbach Company are built on the site of an old high-blast furnace, that had become defunct as to profits under the monopoly we have described. Still, when the shareholders, 65 in number, had an opportunity of selling the site and its excellent waterfall, they clung to

the days, and carried them off to a neighbouring village, where, under a good regulation of the mining board, they were allowed to smelt to the length of their privilege, upon paying a sum to the furnace owners. The fall and site at Mudersbach, where the whole water of the Sieg is carried round to the works, was sold for 1000*l.* The people had to pay 750*l.* for the share they acquired at the neighbouring furnace of Brachbach, to which they carried their 96 days. We could not but think that, if the had given up smelting altogether, and had kept their money, taking chance for selling their ores and charcoal in the market, they would have been better off. But they acted quite in the spirit of the country. [*To be continued in next week's Mining Journal.*]

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY.....Australian Mining Company—offices, at Twelve.
Australian Trust Company—offices, at Twelve.
Ratcliff Gas-Light & Coke Company—New Crane Station, Wapping, Two.
TUESDAY.....Arigna Iron and Coal Company—offices, at One.
Electric Telegraph Company—offices, at Twelve.
Ceylon Railway—offices, at One.
WEDNESDAY...Reading, Guildford, and Reigate Railway—offices, at Twelve.
Compressed-Air Engine Co.—Thatched-House Tavern, St. James's, One.
THURSDAY ....European Gas Company—offices, at Two.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

RELIANCE MUTUAL LIFE ASSURANCE SOCIETY.

The half-yearly meeting of this society was held at their offices, King William-street, City, on Tuesday last, for the purpose of receiving the audited accounts for the past half-year, and for filling up the vacancies in the direction caused by the retirement of gentlemen in rotation under the clauses of the Deed of Settlement.—Mr. JAMES TRAILL was in the chair; and the usual formalities having been gone through, the minutes of the previous special and extraordinary general meetings were severally confirmed.

The ACTUARY then explained the object of that meeting, as distinguished from the annual meetings for the despatch of the general business of the company, and called upon the actuary and secretary to read to the meeting a short report, which the directors had drawn up for the information of the members.

The SECRETARY (Mr. E. O. Smith) accordingly read the report referred to, which, after remarking on the unfavourable influence which the general depression of the past year exercised upon the progress of life assurance societies, congratulated the members on the results of the operations of the Reliance Office, and proceeded to state that the amount of new premiums on policies received by the society during the last half year exceeded by 1030*l.* the amount received during the corresponding half-year; and that upon a comparison of the new business of the company during the past twelvemonth with the business of the preceding twelvemonth, the former was found to have exceeded the latter, in the increase of new premiums, to the amount of 1250*l.* The report also stated that, after payment of all claims, the total of sums paid in respect of mortality amongst its members since the establishment of the society, amounted only to 40 per cent. for a little more than ⅔ths of the estimated risk, being considerably less than the aggregate of premiums received by the society upon lapsed, surrendered, or otherwise cancelled policies. During the last 12 months the society had issued 90 policies varying from 100*l.* to 3000*l.*, and had, during the same period, declined 36 proposals. From the accounts laid on the table, it appeared that the claims against the society for the last half year amounted only to 300*l.*—The report was received with considerable applause.

Mr. PRINSEP (a director) thought the report must prove as gratifying to the shareholders as it was to the directors; and he desired particularly to draw attention to the fact, that of 500 policies which had been issued by the society since its commencement, they had had to meet only eight claims. (Hear, hear.) He believed the rock upon which too many young societies broke was their over-zealous desire to do a great deal of business without sufficient discrimination. Against this rock the present society had had the good fortune to guard themselves, and the result could not but prove satisfactory—attributable, as there could be no doubt it fairly was, to the judicious carefulness of their medical officer—(hear, hear)—and to the calculations of their actuary. (Applause.) He was the more inclined to draw attention to this, because another assurance society in the metropolis had, in a recent report, somewhat prided themselves upon their losses being 15 per cent. within their estimated risk, whereas this society was nearly 60 per cent. (Applause.) Of course, they laid aside the whole amount necessary to meet the estimated risk; but, what he had stated he thought sufficiently evidenced the prudence of their management, and the soundness of their calculations. He should be happy to move the adoption of the report, but would prefer that some shareholder should do so.

Mr. SATCHEL according moved, and Mr. WHEELWRIGHT seconded, the adoption of the report, which was unanimously carried.

The meeting then proceeded to the remaining formal business of the day, and the directors retiring by rotation—namely: Mr. R. W. S. Lutwidge, Capt. Hall, R.N., and Mr. W. Phelps—were re-elected; as were also the retiring auditors—namely: Mr. T. O. Powles and Mr. T. Meeson.

Thanks were then voted to the auditors, to the actuary, and officers of the company, and especially to Dr. Waterfield, as the consulting physician; and these compliments having been severally acknowledged on the part of those gentlemen, a special vote of thanks to the chairman and directors closed the business of the day.

ALFRED LIFE ASSURANCE ASSOCIATION.

The annual meeting of this association was held at the offices, Lothbury, on Wednesday last, the 26th inst.—Sir DAVID SCOTT, Bart., in the chair.

The advertisement convening the meeting having been read,

The CHAIRMAN said that, notwithstanding the past year had been one of great difficulty and distress, affecting every description of business, he was happy to be able to state, that the Alfred Life Association had steadily and profitably progressed. (Cheers.) It would be found by the report that, during that period, they had not issued the average number of policies, but the amounts assured being higher than usual, they amounted to more than the average in point of value. The loss by death during the year had been about 6000*l.*, which would be found very moderate, when they considered the increased business of the office, and the additional mortality that had prevailed. He would not detain them longer, as all the details of the business would be found in the report, which would be read to them, when, should the proprietors be desirous of any further information, he should be happy to give it. (Cheers.)

The SECRETARY (Mr. J. W. Hampton) then, at the request of the chairman, read the following—

REPORT.

In accordance with the provisions of the Deed of Settlement, the directors have again the satisfaction of submitting their annual report for the approval of the members and proprietors. The account of receipts and expenditure for the past year, and the annual balance-sheet, having been examined and approved by the auditors, are laid on the table for general inspection. From these documents it will be seen, that the income of the association has attained the sum of 21,324*l.* 3s. 11d., of which 3096*l.* result from new premiums. The general amount of business completed since the 30th June, 1847, has been equivalent to that of the previous year—the number of policies being somewhat less, but the amounts greater, showing an average of 1027*l.* for each policy. When the general depression of business of every description which has prevailed is borne in mind, the progress of the Alfred during the past year is such as the directors trust will be deemed highly satisfactory: they have been able, after the payment of claims, interest to proprietors, and general expenses, to carry 6499*l.* 4s. 1d. to the credit of the assurance fund, which now amounts to 61,818*l.* 3s. 6d. The claims this year are 6162*l.* 10s. 2d., which is considerably below what the association might have been expected to pay, according to the data upon which the tables are based, and which, had the several claims been of the average amounts, would be nearly twice the sum above-mentioned. The directors have given their constant attention to the secure and profitable investment of the funds of the association; and it affords them much satisfaction to be enabled to state, that whilst their chief anxiety has been devoted to the security of their investments, they have so far succeeded on the score of productiveness, that the total interest for the year, including their investment in the public funds, is at the rate of 4¼ per cent. on the assets of the preceding one. The directors, in conclusion, beg to express their determination, by continued efforts, to augment the general prosperity of the association, and to secure and maintain that public support and consideration which is now enjoyed by this institution.

The CHAIRMAN then said, he hoped the report would prove as satisfactory to the proprietors as it was to the directors, who, he could assure them, had spared no pains to promote the welfare of the institution. He was not only desirous that the public should know the care bestowed upon the affairs of the institution, but that they should appreciate the liberality with which it was conducted. When addressing the proprietors last year, he had taken the liberty of endeavouring to press upon them the beneficial effects which must result from their co-operation in extending the business of the office. He had not been very successful in that endeavour, for he believed that they would have a difficulty in finding more than two or three policies which had been effected through the intervention of shareholders. (Hear, hear.) Notwithstanding his failure on the former occasion, he would again press the matter on the attention of the proprietors, as the power of the directors must diminish according to the energy with which it was exercised. He hoped, therefore, that he might assume that the assistance he sought had only been delayed, and that on future occasions he would not have to lament the want of aid from the proprietors, but that it would be his pleasing duty to return them thanks for the happy results of their more active support. (Cheers.) If any gentleman had any observations to make, he should be happy to hear him.

After a few observations on matters of account, in which it was stated that the actual receipts from premiums exceeded 18,000*l.* per annum—Mr. GAY moved, that the report be received and adopted. He was sure that it was of so satisfactory a description, as to need no observations from him to ensure the motion being acceded to. The motion having been seconded, was carried unanimously.

Mr. DUNNAGE said, that he was sure there was one thing which they could not omit to do—to express their thanks to the directors, in whom they must all have the fullest confidence, for the very able and efficient manner in which the affairs of the institution had been conducted. The chairman had remarked on the very little assistance which had been given to the directors by the proprietors in promoting the business of the association, and, therefore, they were the more entitled to the thanks of the proprietors, as they must all feel satisfied that the directors must have used the greatest exertions to place them in the position they were then in. If they would bear with him for a minute, he would call their attention from a paper he held in his hand to the progress made by the association; He found that the assets, in 1839, were 16,959*l.*; in 1841, they were 32,000*l.*; in 1843, 57,000*l.*; in 1845, 72,000*l.*; and in 1847, no less than 99,788*l.*—a result which, he would venture to state, could hardly be shown by any other office; for, while they had only between 16,000*l.* and 17,000*l.* assets in 1839, they had increased in eight years to nearly 100,000*l.* He was sure that—as the chairman had observed so little had been done by the proprietors—the directors were well entitled, for the great exertions they had made, to the cordial thanks of the assured, and the shareholders.

Mr. JAMES had great pleasure in seconding the motion, fully concurring in all the sentiments expressed by the last speaker. He would only make one remark on the subject referred to by the chairman—viz.: the small aid given by the proprietors to the directors in promoting the business of the association. He was sure that none could undervalue the importance of so promoting the business; but the apparent apathy during the past year, he thought, was to be accounted for, to a great extent, from the extreme pressure which had existed on every branch of business, and which had prevented that prudent reserve for the future being made, which would have been made under ordinary circumstances; for, instead of having money which could be spared for effecting an assurance on their lives, too many had had the greatest difficulty in keeping their heads above water.

The motion having been carried by acclamation, the CHAIRMAN returned thanks for the honour conferred upon the directors, which, he assured the proprietors, was highly gratifying to them. He was obliged to the hon. gentlemen who had moved and seconded the resolution, for the spirit in which they had received his hint as to the little assistance received from the proprietors; and he could assure them and the other shareholders, that they might continue to rely upon the continued exertions of the directors to promote the interests and welfare of the association.

The CHAIRMAN having announced that the Deed of Settlement was ready for signature, a short conversation arose as to the propriety of having it printed for the use of the proprietors—the consideration of which, however, it was agreed to leave to the directors.

The meeting then separated.

GEOLOGY.—Persons wishing to become ACQUAINTED with this interesting BRANCH OF SCIENCE, will find their STUDIES greatly FACILITATED by means of ELEMENTARY COLLECTIONS, which can be had at TWO, FIVE, TEN, TWENTY, or FIFTY GUINEAS each, arranged and sold by
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RAILWAY AND OTHER IMPORTANT RECORDS,
EFFECTUALLY PROTECTED FROM DAMP AND VERMIN. 47
Extract from the Appendix to the Second Report of the Commissioners on the Fine Arts.
"In 1839, I superintended the construction of a house, of three stories, on the Lac d'Enghein. The foundation of the building is constantly in water, about 19½ inches below the level of the ground floor. The entire horizontal surface of the external and internal walls was covered at the level of the internal ground floor with a layer of
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DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

LIVERPOOL AND BURY.—The works on this line are rapidly drawing towards completion, and it is expected that it will be opened in about a month or six weeks. It is one of the most important portions of the Lancashire and Yorkshire scheme, being upwards of 30 miles in length with the link through Heywood, to unite it with the Manchester and Leeds section; and besides competing with the Manchester and Liverpool section of the London and North-Western for the Yorkshire traffic (which over this route will be effected with a saving of time and without change of carriages), will also offer very nearly as short a route from Liverpool to Manchester, by its junction with the Bolton and Manchester, now a portion of the same company's lines, near Bolton. It is also expected to have a large coal and mineral traffic.

NEW PATENTS.

Chev. A. E. Le Molt, Conduit-street, Middlesex, for improvements in apparatus for lighting by electricity, parts of which may be made use of in other applications of electricity.
D. Napier, and J. M. Napier, engineers, York-road, Lambeth, for improvements in mariners' compasses, also in barometers and in certain other measuring instruments.
W. Thomas, merchant, Cheapside, for improvements in the manufacture of stays, boots, and shoes, also in fastening and connecting fabrics and garments.
J. King, foreman to Messrs. Shears and Sons, Bankside, and H. Medhurst, operative engineer to the said Messrs. Shears and Sons, for improvements in gas meters.
C. Hancock, gent., Brompton, Middlesex, for improvements in apparatus and machinery for giving shape and configuration to plastic substances.
J. Grist, engineer, New North-road, Middlesex, for improvements in furnaces and fire-places.

DESIGNS FOR ARTICLES OFUTILITY REGISTERED.

Pretyman and Hobson, Cornhill, child's cot.
S. A. Carpenter, Birmingham, wedge apparatus (applied to the fronts of a brace, and applicable to other uses.)
S. Minshul, Birmingham, hearse to be drawn by hand.
J. Rowland, W. Rich, and R. Harris, 23, New Bond-street, the aptandum trowsers.
W. and F. Thorn, John-street, Cavendish-square, the aquimotive spring.
R. W. Winfield, Birmingham, gas burner.
Stock and Sharpe, Birmingham, gas burner.—*Mechanics' Magazine.*

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Carr's Hartley 14 6—East Adair's Main 12—Holywell Main 14 3 to 14 6—North Pontop 11 6—Original Tanfield 11—Ord's Redheugh 12 6—Tanfield Moor 14—Tanfield Moor Butes 12 6—Townley 13 6—Wylam 13 3—Wall's End Bewicke and Co. 14 9—Hedley 14 6—Harton 14 9—Riddell's 14 9—Eden Main 15 to 15 6—Lambton Primrose 15 3—Belmont 15 6—Haswell 16 6—Hetton 16 3—Jonassohn 14 6—Lambton 16—Shotton 15 6—Stewart's 16 3—Caradoc 15 3—Hartlepool 16—Heugh Hall 14 9—Kelloe 15—South Hartlepool 15 3—Thornley 15—Adelaide Tees 15 3 to 15 6—Tees 16—West Cornforth 14 3—Howard's West Hartley Netherton 14 6—Powell's Duffryn Steam 20 3—Sidney's Hartley 14 9.—Ships at market, 72; sold, 61.

WEDNESDAY.—Carr's Hartley 14 6—Davison's West Hartley 14 6—Adair's Main 12—North Pontop 11—New Tanfield 13—Original Tanfield 11 6—Ord's Redheugh 12 6—Tanfield Moor 14—Townley 13 6—Wall's End Framwellgate 14 6—Gosforth 15—Heaton 14 9—Harton 14 9—Riddell's 14 9—Washington 14 6—Eden Main 15 3—Belmont 15 9—Bell 15 6—Haswell 16 6—Hetton 16 3—Lambton 16—Russell's Hetton 15—Stewart's 16 3—Cassop 15 3—Hartlepool 16—Heugh Hall 15—Kelloe 15 3—Thornley 15 3—Adelaide Tees 15 6—Cowndon Tees 14—Denison 15—Richardson's Tees 14—Seymour Tees 15—South Durham 14 9—Tees 16—West Hetton 14 9—Cowpen Hartley 14 6—West Hartley Netherton 14 6—Hartley 14—Sidney's Hartley 14 6—Ships at market, 91; sold, 80.

FRIDAY.—Bate's West Hartley 14—Carr's Hartley 14 6—Dean's Primrose 13—Adair's Main 12—Hasting's Hartley 14 6—Holywell Main 14 6—New Tanfield 13—Original Tanfield 11 6—Ord's Redheugh 12 6—Townley 13 6—Walls's End Wharncliffe 14 9—Washington 14 6—Eden Main 15 6—Lambton 16—Shotton 15 6—Stewart's 16 3—Whitwell 15—Caradoc 15 9—Heugh Hall 15 3—South Hartlepool 15 3—Tees 16—Cowpen Hartley 14 6—Sidney's Hartley 14 6.—Ships at market, 37; sold, 32.

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60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 2 3
			1840	116 7 6	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year. F. FERGUSON CAMROUX, Secretary.

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